

<http://informatics.nic.in>

Informatics

Chhattisgarh State
In constant pursuit of
excellence through ICT

LEAD STORY

Digital India Awards 2016

Union Minister visits
NIC, Lucknow

Minister of State visits
NIC Head Quarters

District Gurugram
Raising the benchmark of
District Informatics

**Indian Customs EDI
Systems (ICES)**
Doing business in Int'l
trade made easier

Employee Online App
Single point resource
for employee
Information

JavaHelp System
Server based CollabCAD®
HelpViewer

DND Services App
Freedom from unsolicited
commercial communications

ServicePlus
Metadata based framework
enabling versatility in
eService delivery



INFORMATICS

Volume 25 No. 3, January 2017

PATRON

Neeta Verma

ADVISORY PANEL

Sanjay Gahlout

D.C. Misra

Dr. Ranjna Nagpal

G.S.Bansal

M. Vinayak Rao

EDITOR

Mohan Das Viswam

EDITORIAL BOARD

R. Gayatri

Vivek Verma

Rubaiyat Ali

Anshu Rohatgi

Prashant Belawariar

WEB VERSION

Lokesh Joshi

Shashi Kant Pandey

Pankaj Kumar

EDITORIAL ASSISTANCE

Siddhant Shekhar

GRAPHIC DESIGN

Archana Sharma

Manish Rath

Anand Kumar

PRINT, CIRCULATION & DISPATCH

Anita Arora

Anita Bhardwaj

Jasvinder Kaur

PUBLISHED BY

National Informatics Centre

Ministry of Communications & IT

Government of India

A-Block, CGO Complex, Lodhi Road

New Delhi-110003

INDIA

PRINTED AT

VIBA PRESS PVT. LTD

C-66/3, Okhla Industrial Area

Phase-II, New Delhi- 110 020

INDIA

EDITORIAL



wards are attributed mainly to two important aspects; appreciation for the achievers and encouragement for the aspiring. These gestures of rewarding have a substantial impact on the general wellbeing of a society. Governments across the world consider awards to have an impact in improving public services. Indian Government has always been ahead in acknowledging those who provide or support public service with passion and commitment.

One of the prime focuses of our Government today is ensuring the success of Digital India, which depends largely on the efforts of the people working behind the scenes. The Digital India Awards ceremony concluded recently, convened by National Informatics Centre, is one of the key initiatives honouring the champion achievers who enable better eGovernance facilitating improvements in the lives of the citizens. The feedbacks being received on the tremendous success of the event are 'Awards' for the organizers and thus NIC is committed to keeping this legacy alive. In this Issue, we present a tableau of Digital India Awards 2016.

We look at Chhattisgarh as one of the leading states in ICT implementation in the "From the States" section. In the "District Informatics", we feature two districts; East Godavari district, which serves as one of the 43 pilot districts for the DBT Scheme of the Government of India and Gurugram district, where one of the gram panchayats has been selected for development as one of the 10 Model e-Panchayats in the country. We look at some of the innovative Apps that have been developed by the various centres of NIC like the DND App developed for TRAI and the Employee Online App for the Department of Personnel and Training among many others. In the 'Technology Update' section, we cover JavaHelp System, an online server based help viewer. Our usual features like "In the News" and "International e-Gov Updates" are here as always.

I hope you are enjoying a splendid festive season and wish you great New Year ahead.

Happy Reading!

Editor

INFORMATICS

Room No. 375, 3rd Floor, NIC HQ,
A-Block, CGO Complex, Lodhi Road
New Delhi- 110 003

Phone: 011-24305365, Email: editor.info@nic.in

New Year Message

Let me begin by wishing all the readers and contributors of Informatics a very happy new year. Every new year brings with itself a new beginning and a new hope of making our lives more joyous.



Technology, especially ICT, has become a major force behind the changing face of the nation. The citizens of our nation, despite all the challenges they face, have recognized the power of technology and are embracing it in their daily lives with open arms. The Government, recognizing the expectations and aspirations of the people, has been taking many steps to satisfy the citizens. NIC, being the premium technological institution of the Government, provides every support necessary in empowering the common citizens and making their lives easier and more comfortable. With innovative applications of ICT from cashless payments to digital certificates and documents, the various initiatives of NIC are poised to save many citizens' valuable time, effort and money.

New years bring new opportunities disguised as challenges for the nation as well as the organization. Reinvigorated by the appreciation and support showered on us, NIC is committed to using ICT in helping the Government and the citizens face the challenges successfully. Let us all, as our new year resolution pledge to turn every challenge into an opportunity and move forward on our journey towards a better tomorrow.

Wishing you all the best,

Neeta Verma
Director General, NIC

CONTENTS



48

LEAD STORY

10-13 Digital India Awards

SPOTLIGHT

14-15 Union Minister's visit to NIC, Lucknow

16-17 MoS visit to NIC H.Q.



10-13



14-15

29-30 DND Services App of TRAI

31-33 ServicePlus- Enabling versatility in eServices delivery

34-37 Employee Online App

38-39 ePayment Services, Goa



29-30

- 01 Cover
- 02 Editorial
- 03 New Year message by DG, NIC
- 04 Contents

FROM THE STATES

05-09 Chhattisgarh: In constant pursuit of excellence through ICT



16-17

DISTRICT INFORMATICS

18-20 District Gurugram

21-23 District East Godavari

E-GOV. PRODUCTS & SERVICES

24-26 Indian Customs EDI Systems (ICES)

27-28 Online Rohtang Pass Permits Issuance System

TECHNOLOGY UPDATE

40-42 JavaHelp System

43-44 INTERNATIONAL E-GOV UPDATE

45-48 IN THE NEWS

Chhattisgarh, 'the Rice Bowl' of India:

In Constant Pursuit Of Excellence Through ICT

The NIC State Centre has been instrumental in providing ICT based efficient and accessible eGovernance services to citizens by implementing projects and providing able technical support for various initiatives of the Government. Majority of eGovernance applications, frameworks, platforms and websites of the State have been developed, implemented and maintained by the NIC State Centre.

MANOJ KUMAR MISHRA

Sr. Tech. Director & SIO
mk.mishra@nic.in



Y. V. SHREENIVAS RAO

Technical Director
yvsrao@nic.in

Edited by
PRASHANT BELAWARIAR

Formed on the 1st November 2000 by dividing Madhya Pradesh, the state of Chhattisgarh is the 10th largest state in India in terms of area. The state is blessed with abundant natural beauty, waterfalls, rivers, caves, vast forests with a variety of wild life as well as diamond, iron, coal and bauxite mines. The ancient temples and structures dating back to 5th century A.D. are the surviving symbols of the state's glorious history and rich culture.

A list of IT infrastructure and some of the projects implemented in the recent years has been presented in the following sections.

NATIONAL KNOWLEDGE NETWORK (NKN)

A high speed (Multi-Gigabit) network has been setup in over 30 institutes and universities, including the IIM & NIT of the state for knowledge and information sharing. Chhattisgarh State Wide Area Network (CG SWAN) and State data Centre (SDC) are also connected over the NKN. Based on this high-speed network, a State Of The Art Virtual Classroom has been established in NIT Raipur. The Wi-Fi Connectivity at Mantralaya and HOD building uses NKN connectivity. SWAN DMC has been integrated with the NIC network at 17 districts of the state as well as an OFC ring has been established among institutes like NIT, Pt. Ravi Shankar, GAC and Ayush University to provide redundancy.

CENTRALISED ONLINE REAL-TIME ELECTRONIC PDS (COREPDS)

Chhattisgarh has successfully launched FPS automation under the name

COREPDS (Centralised Online Realtime Electronic PDS). COREPDS has introduced Aadhaar authentication of the beneficiary at the time of service delivery for checking against proxy issues and empowering beneficiaries with the right to choose FPS by offering portability of FPS, to improve service delivery. In COREPDS, FPSs are equipped with an Android tablet with GPRS connectivity. PDS commodities are delivered to beneficiaries with Aadhaar authentication or with OTP (One Time Pin) authentication. They can now go to any FPS to claim their entitlements. Portability has also introduced the possibility of losing customers for FPSs and encouraged competition among them, giving them a reason to improve service delivery, in terms of not only quality and quantity of



Menu UI screen COREPDS App

commodities but also in terms of behaviour with the beneficiaries at the FPSs.

COMPUTERIZED FOOD GRAIN SUPPLY CHAIN MANAGEMENT

Chhattisgarh operates computerized food grain supply chain starting with paddy procurement from farmers to its storage, milling and distribution of rice and other commodities to 5.9 million ration card holders through 12,800 Fair Price Shops (FPS). As a part of this project, 2000 paddy procurement centres, 70 storage centres, all concerned district offices, 120 Civil Supplies Corporation distribution centres and 35 FCI rice receiving centres have been computerized covering six different organizations involved in food grain management. Farmers are receiving their dues through online account transfer within 48 hours. Miller's registration, agreements with millers and generation of delivery orders etc. is computerized. The whole PDS supply chain has also been computerized. Truck dispatch information is being sent to more than 60,000 vigilant citizens to check for diversion.



COREPDS Mobile App log in screen



LAND RECORDS COMPUTERIZATION PROJECT (Online BHUIYAN & BHU-NAKSHA)

After the successful implementation of its client-server model of the application for 14 years, an online version of the software has been developed and implemented in all tehsil offices. It provides the facility to enter and modify information related to khasra, crop, land use, irrigation sources, land revenue, carryout mutation and print Khasra and Khatauni reports. The application supports UNICODE fonts for entering data in Devnagari. Provisions for Aadhaar seeding have also been made in the application. An interface for banks has been provided to record loan sanction details to prevent multiple loan issuance against same Khasra. Digital signing of documents is being introduced to enable citizens to instantly download Khasra and Khatauni reports (with legal sanctity) for any purpose. A mobile application has also been developed which enables Patwaris to update records on tablet and the public to access basic land information. An open source based comprehensive online tool, BHU-NAKSHA, has been developed which stores and secures the digitized parcel maps and helps users edit them to reflect actual changes arising out of mutations. The software caters to all basic necessities of Patwari with regard to parcel map management. The informative dashboards provided at Patwari, Tehsildar, District Collector and Secretary levels ensure effective monitoring of the

project's implementation. These applications can be accessed at the Revenue department's website <http://revenue.cg.nic.in>.

REVENUE CASE MONITORING SYSTEM

<http://cg.nic.in/revcase>

This is an online application to record details of revenue cases of various revenue courts in the state. It facilitates daily cause list preparation, case search based on certain parameters for the public to find out the current status of a case, final order generation, scanning and archiving documents related to case etc. Dashboard facility is also available for senior officers to monitor case disposal at various courts.

E-GAZETTE

<http://cg.nic.in/egazette>

This web-enabled application facilitates citizens to search through stored State Government Gazettes (Ordinary and Extraordinary) by providing minimum information such as notification date, department name etc. Citizens can download Gazette notifications instantly without having to visit departments to obtain a copy.

E-KOSH: TREASURY COMPUTERIZATION

The product is aimed at providing solutions for effective fiscal management, budgetary control on expenditure,

receipts, accounting, online tax payment etc. An e-Payment system is being facilitated to ensure that payments are credited to the beneficiary's bank account directly from the treasury with respect to the salaries, sales tax refunds etc.

e-Kosh is a hybrid system that has two components e-Kosh (Core) offline and e-Kosh online (online portal) with synchronization between these two. While e-Kosh (Core) takes care of process automation at treasuries, e-Kosh online provides online information on expenditure, receipts, budget availability etc. e-Kosh online provides 99% cashless payment.

E-AWAS – CHHATTISGARH HOUSING BOARD

<http://cghb.gov.in>

The complete end to end computerization of CGHB is being undertaken and two modules viz. Estate and Accounts have been rolled out.

Estate module allows:

- Sale of forms online and online registration of allottee
- Allotment of a house through a live lottery and issuance of online allotment letter
- Investor login for tracing the payment and project details
- Support for both commercial and residential property

Account module allows:

- All the accounting reports viz. daily cash and voucher reports, bank reconciliation and ledger reports along with the various bills viz. hand and money receipts, pay and advance bills are generated online
- The other monthly and yearly reports viz. trail balance, income and expenditure and balance sheet are also generated online.

E-PAYROLL

The online payroll software is implemented at the state to facilitate DDOs to generate salary bills, personal claims, arrear bills for each state government employee. The eKosh Project received the Oracle e-Governance Excellence Award in 2006 and India-Best Skoch award in 2013.

COMMERCIAL TAX DEPARTMENT COMPUTERISATION

<http://comtax.cg.nic.in>

To provide a simplified, rational and progressive tax system, with a view to increasing the tax revenue of the state, a completely automated system was developed for the business owners dealing in VAT & CST. This system allows them to complete the registration as well as file returns online. It also has features for online forms, amendments, cancellations and integration with e-Challan and eRefund of the treasury. Complete support

for the rollout of GST in the state is also being provided.

E-ROJGAR: ONLINE EMPLOYMENT SERVICE

<http://cg.nic.in/exchange>

This is a web application that takes care of all the common activities carried out at employment exchanges to maintain uniformity of the procedures such as registration, vacancy booking, submission of candidates to the employers, employment statistics and vocational guidance and career counselling for self-employment.

VIDHAN SABHA COMPUTERIZATION

<http://cg.nic.in/cgvidhanqams>

A web based MIS application which caters to the question/ answer monitoring needs of the State Assembly. On one hand, it takes care of activities related to the initiation of a question by MLAs till its finalization and sending it to the HODs on Vidhan Sabha side and on the other hand, it takes care of the activities starting from receiving the question by HODs/Secretary till the reply is sent to Vidhan Sabha from the Ministry's side.

COMMERCE AND INDUSTRIES DEPARTMENT COMPUTERIZATION

The Government of India has initiated Ease of Doing Business (EoDB) to make India a better place for doing business and to promote this, rankings have been given to the states of India on the basis of their performance in offering services to industries. Chhattisgarh government has started computerization of its services. For this, all the services offered by the department like clearances, various certificates and incentives need to be online. Chhattisgarh State has been ranked 4th for the second consecutive year in Ease of Doing Business (EoDB) index, organised by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industries & World Bank.

IGMIS - INTEGRATED MANAGEMENT INFORMATION SYSTEM

<https://igkvms.cg.nic.in>

CHHATTISGARH HOUSING BOARD

INVESTOR DETAIL

WELCOME
UNIT BHAVNA AWASTHI AND
SUNIL KUMAR AWASTHI
Investor ID: 1231234

CHANGE PASSWORD
LOG OUT

NEWS & EVENTS PERSONAL DETAILS PROJECT DETAILS DOWNLOAD FILES

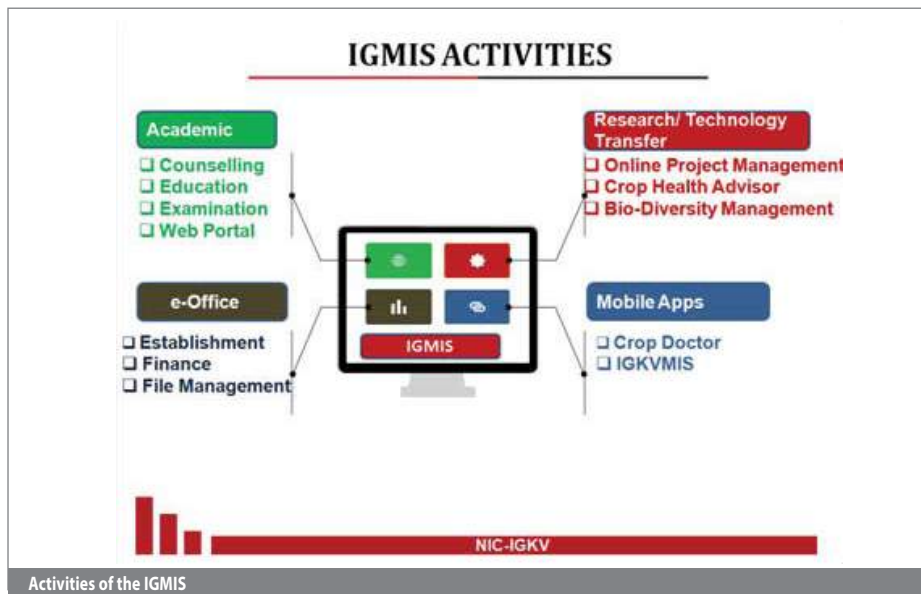
PROJECT DETAILS

Estate Management Zone: EN Zone-03, Madhya Vihar
Project Name: CONSTRUCTION PHASE 1
Model Type: LIG & MIG FLAT
Quarter No: SEC 1A/Plot E BL-75/101
Scheme Name: Pragati Vihar Janta Thana
Project Status: Under Construction

PAYMENT DETAILS

Total Cost of House (Offer Price): ₹ 4,50,000.00
Registration Amount Paid: ₹ 10,000.00
Amount Paid Till Now (Including Registration Amount + Interest if any): ₹ 2,00,000.00
Remaining Amount (Including Interest if any): ₹ 4,50,000.00

Chhattisgarh Housing Board's Website



IGMIS was conceived as a framework incorporating fully digitized solutions for all activities of Indira Gandhi Krishi Vishwavidyalaya (IGKV), Raipur. It is a web-enabled, role and work-flow based ERP solution for IGKV to accomplish

activities like counselling, education, examination, research, extension, establishment, finance, web portal etc. This integrated system enables e-Governance in 31 Colleges, 8 Research Stations and 20 KVVs situated at the most remote places of Chhattisgarh. It is highly beneficial for students, employees and farmers of Chhattisgarh.

IGMIS MOBILE APP

IGKV introduces the next generation experience through the IGMIS mobile application to enhance quality and effectiveness of education and learning on favourite mobile/ tablet devices. It

provides access to student profile, registration card, fee receipts, result notifications and an employee corner.

CSSDA (CHHATTISGARH STATE SKILL DEVELOPMENT AUTHORITY) PORTAL

(<https://cssda.cg.nic.in>)

It is a web application that takes care of the training provided under the skill development scheme of CM of Chhattisgarh in Modular Employable Skills (MES) courses right from the registration of the candidates for training, training batch creation, TBN number and ABN number generation to assessment of training batches and certification of the candidates.

Biometric attendance of trainees at VTP centres has been integrated with the CSSDA portal to ensure the quality of skill training.

A need-based skill survey module has also been developed that captures the data of skill survey conducted on the skill seekers of the age group 14-45 years to identify the top three priority sectors in which the skill training is required the most.

DEPARTMENT OF SCHOOL EDUCATION: EDUCATION PORTAL

<http://eduportal.cg.nic.in>

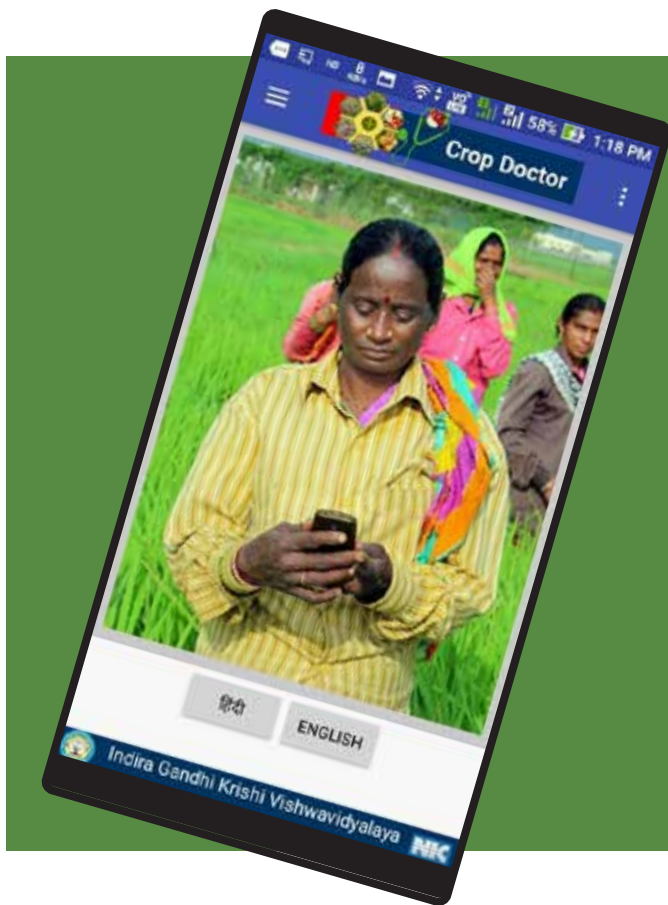
The basic objective of the education portal



IGKV Android Mobile App



Department of School Education Website



CROP DOCTOR

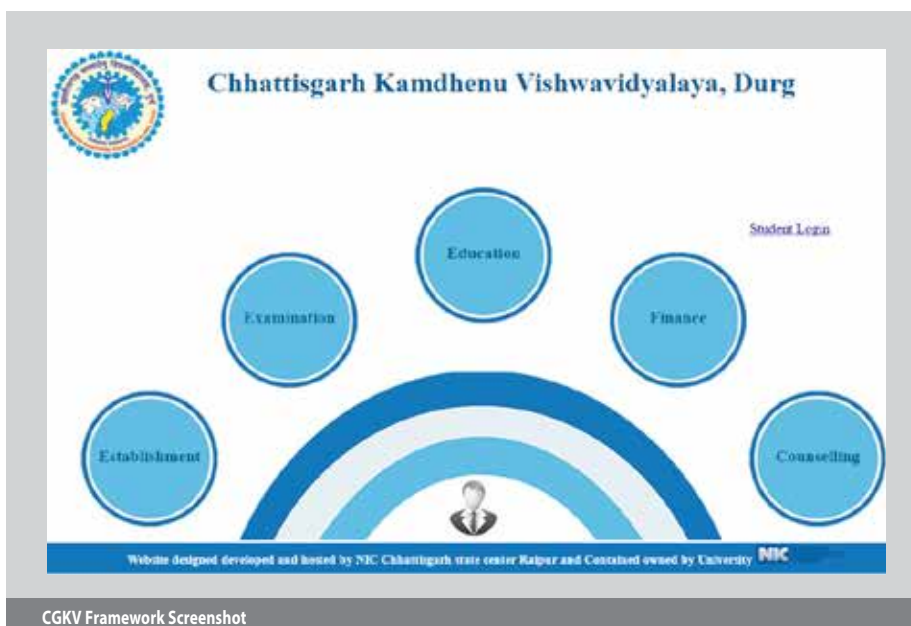
Crop Doctor is an Android based bilingual mobile application for farmers. It provides a solution for problems related to insects, diseases and nutrient deficiency management of rice, wheat and maize. This mobile app is picture based, downloadable from the Google Play Store.

is to create a single point source for all the information related to schools, teachers and students. The portal provides an updated view of the schools' basic information, infrastructure details, teachers' contact information, academic qualification

details, posting and promotion details, official notices and circulars etc. The portal also facilitates generation of various types of official orders like posting, promotion, transfer, bill payment, increment, leave sanction, salary deduction, disciplinary action, LPC etc.

SUMMARY

NIC State Centre, Chhattisgarh has been instrumental in providing assistance and technical expertise aimed towards making the lives of the citizens easier by improving access to various eGovernance schemes. Their efforts have helped the administrators at various levels of the Government in managing the various schemes and initiatives of the Government more effectively. The State Centre will endeavour to do exemplary work in the field of ICT and eGovernance for many years to come.



For further information, please contact:

MANOJ KUMAR MISHRA
Sr. Technical Director & SIO NIC
AD-II/14, Admin Block, Mahanadi Bhavan,
Mantralaya, Naya Raipur, Chhattisgarh -492 002
Email: mk.mishra@nic.in
Phone: 0771- 221238

CGKV Framework Screenshot

Digital India Awards 2016 Ceremony Held In A Grand Way

National Informatics Centre takes great pride in successfully organizing such an important event of the Government to acknowledge the exemplary eGovernance initiatives, products & services

By **MOHAN DAS VISWAM**

India has witnessed a rapid transformation in the last few decades which is fuelled by the ICT revolution. Technology has gone above and beyond its call of duty and has become indispensable in modern governance and living and is expected to play a continually bigger role in the years to come. The “Digital India Awards”, incepted to honour exemplary initiatives, commitment and hardwork creating remarkable impact in the lives of citizens using ICT had its 2016 season at Vigyan Bhavan, New Delhi on 19th December 2016. Featured here are some important moments captured through lens.



“

I believe the people in the Government do some great work and their achievements, their worth, their contributions, their hard work needs to be recognized. Therefore, I have always said to scale up these awards so that the country may know as to how government officers, urban bodies, state governments, district governance units are contributing towards the success of Digital India.

Ravi Shankar Prasad ”

Union Minister
Electronics & IT, Law & Justice



**Digital
India Awards
2016**



“

Among the many transformative initiatives launched by the Hon'ble Prime Minister, Shri Narendra Modi, Digital India, the flagship initiative being steered by MeitY stands out in many ways in terms of stakeholders in the industry and the Government at levels...and consequential impact both in terms of social and economic aspects in the citizens of this country.

”

P.P. Chaudhary
Minister of State
Electronics & IT, Law & Justice





“

eConnectivity is essential today for all purposes...especially in the field of Higher Education and research, it has become absolutely essential. If India has to leap frog, and India has to leap frog to a knowledge economy, all the efforts that are being put in the under the Digital India programme are very essential.

Dr. R. Chidambaram
Principal Scientific Adviser, Gol

”



“

This year marks the first of the Digital India Awards and therefore this is a milestone for all of us here who are working on the Digital India programme. I want to pay my compliments to all those of you who in your own sphere are doing pioneering work in Digital India. I must place on record that it was a very difficult job for the jury to actually narrow down the list of prize-winners.

Aruna Sundararajan, IAS
Secretary, MeitY

”



Ms. Alka Mishra, Sr. Technical Director (NIC) delivering the Vote of Thanks



Digital India Awards 2016 Jury members receiving mementos



“

I must say that we are, today, witnessing a transformation, a digital transformation of the country we have not seen in the history of the nation. To that extent, all of us who are associated with this exercise are really fortunate to be a part of it and to be contributing to this huge transformational effort.

Dr. Ajay Kumar, IAS
Additional Secretary, MeitY

”



“

I congratulate all the awardees for their wonderful contributions to Digital Governance. I would also like to take this opportunity to thank all of you present here and connected through the webcast for applying for the Digital India Awards. It is only your overwhelming response with so many nominations that make these awards so special.

Neeta Verma
Director General, NIC

”



Digital india Awards 2016 bestowed 28 awards across 8 categories including Jury's Choice of Awards. The Union Minister of Electronics & IT and Law & Justice, Shri Ravi Shankar Prasad was the Chief Guest of the event and the Guest of Honour was Shri P. P. Chaudhary, the Minister of State for Electronics & IT and Law & Justice. Dr. R. Chidambaram, Principal Scientific Adviser to the Government, Ms. Aruna Sundararajan, IAS,



Some of the winners with Digital India Awards 2016

Secretary (MeitY), Dr. Ajay Kumar, IAS, Additional Secretary (MeitY), Ms. Neeta Verma, DG (NIC) and Ms. Alka Mishra, Senior Technical Director (NIC) also graced the occasion with their esteemed presence.

In his speech, Shri Prasad appreciated the efforts and initiatives of NIC and encouraged the organization to become the torch bearers of the digital revolution the country is witnessing.

An eminent Jury constituted of senior officials from the Government as well as representatives from the industry and the academia reviewed over 3000 applications received from all over the country to select the best projects and initiatives.

The event was concluded on a high note and will go down as a red letter day in the history of the organization.

View more photos at

<http://digitalindiaawards.gov.in/>



Jubilant Project team after the successful event

AWARD WINNERS

Exemplary Online Service

- > VYAS- VarnijYakar Automation System for Department of Commercial Taxes, UP
- > E-permit, Commercial Tax Dept., Gujarat
- > One Stop Clearance System, Punjab Bureau of Investment Promotion

Open Data Champion

- > Office of The Registrar General, India
- > Health and Family Welfare
- > Directorate of Marketing & Inspection
- > Rajya Sabha
- > National Crime Records Bureau

Most Innovative Citizen Engagement

- > MyGov
- > Online Management, Monitoring and Accounting System (OMMAS) for Pradhan Mantri Gram Sadak Yojana (PMGSY)
- > Coimbatore City Municipal Corporation
- > IT Initiatives of Simhasth Kumbh, Ujjain (Jury choice)

Outstanding Digital Initiative by Local Body

- > Surat Municipal Corporation
- > Greater Visakhapatnam Municipal Corporation.
- > Web and Mobile based Integrated Complaint Logging and Resolution Tracking System- Madurai Corporation
- > e-NagarSewaUP- Electronic Workflow based Reform for ULBs in Uttar Pradesh (Jury choice)

Best Mobile App

- > Citizen Cop App, Chattisgarh
- > Mid-Day-Meal App, Himachal Pradesh
- > GARVApp, Ministry of Power

Web Ratna- Ministry/ Department

- > Ministry of Human Resource Development
- > Ministry of Health & Family Welfare
- > Ministry of External Affairs

Web Ratna- State/ UT

- > Rajasthan
- > Tamil Nadu
- > Haryana

Web Ratna- District

- > Website of Collectorate, North Goa
- > Website & Initiatives of Kupwara, J&K
- > District Administration Udham Singh Nagar website, Uttarakhand

Union Minister Visits NIC Uttar Pradesh, Inaugurates State Data Centre

Shri Ravi Shankar Prasad also launches Digi-Connect and Pariksha-Connect initiatives during his recent visit.

With inputs from **ANSHU ROHATGI**

Shri Ravi Shankar Prasad, Hon'ble Union Minister of Electronics & IT and Law & Justice, visited the NIC Centre at Lucknow on 12th November, 2016. During the visit, he inaugurated the new UP Data Centre and launched the Digi-Connect and Pariksha-Connect initiatives of the NIC. Digi-Connect integrates the Digital Locker scheme of Government of India with the certificates being issued in the State under the eDistrict Programme while the Pariksha-Connect programme allow the citizens to apply for exams, download admit cards, check results and pay the examination fee using Net Banking, etc. from the CSCs available in their villages for all online recruitment programmes being

carried out through the Pariksha portal. With the launch of Digi-Connect, Uttar Pradesh has become the top State in the country with more than 4.1 crore certificates linked to Digital Lockers of beneficiaries.

The important dignitaries present at the occasion present at the event were Ms. Neeta Verma, Director General (NIC), Dr. Dinesh Sharma, Hon'ble Mayor of



Lucknow, Shri D.C. Misra, DDG (NIC), Shri Vishnu Chandra, DDG (NIC), Dr. Saurabh Gupta, State Informatics Officer, NIC, Uttar Pradesh, Shri Mukul Singhal, Principal Secretary, (Planning, GoUP), Shri Ajay Deep Singh, Special Secretary IT & MD, UPDESCO (GoUP) and Ms. Reena Hota Singh, DDG (UIDAI). All the officials of NIC, UP were also present at the occasion and 75 district centres of NIC were connected to the event via Video Conferencing. The event was covered by Doordarshan and All India Radio and was streamed live through webcasting by NIC HQ, New Delhi.

The inauguration was followed by lighting of the lamp by the dignitaries and a detailed review of the NIC Data Centre,

NICNET, UPSWAN, and NKN NoC. The Minister also interacted with the district officials of NIC from Bijnor, Sitapur and Gorakhpur through Video Conferencing. The officials briefed the Hon'ble Minister on the various eGovernance initiatives undertaken in their respective districts. Congratulating the NIC officials on their contributions, the Minister suggested all DIOs display the list of citizen-centric schemes in their offices and create awareness amongst masses through different media. He also encouraged them to keep themselves updated with technology and come up with innovative applications of ICT so that the same can be adopted across the country. The Hon'ble Minister also released the Souvenir of NIC Uttar Pradesh at the function.



Minister of State, E&IT Visits NIC Head Quarters

Inaugurates 'Ganga', the Video Conferencing Centre and lauds the exemplary work of NIC.

Shri P. P. Chaudhary, Hon'ble Minister of State of Electronics & Information Technology, Law & Justice visited NIC HQ at New Delhi on the 13th of November, 2016. Ms. Neeta Verma, DG (NIC), all DDGs, Group Heads and Division Heads were present at the occasion. SIOs of all States attended the review meeting via Video Conferencing.

"Ganga", the Video Conferencing Centre at NIC HQ was inaugurated by Shri P. P. Chaudhary, who followed it with a detailed review of NIC's Central and State projects. DG NIC delivered a presentation on the major projects and applications of NIC.

Despite the day being a holiday and a rescheduling of the arrival of the Minister to late evening due to unforeseen circumstances, all the officials waited eagerly for his first visit. The Minister reciprocated their excitement and showed a keen interest in the projects and initiatives undertaken by NIC.

The Minister, chairing the review, discussed in detail the projects of NIC and also asked the respective in-charges about the various challenges and obstacles faced by them. He directed for concept notes to be prepared on diverse topics ranging from "Sustainable policy for design, development and deployment of IT software solutions" to "Dedicated Training Academy for NIC". The Minister praised the hard work of NIC officials in making "Digital India" a success and promised to address the challenges faced by NIC.

The Minister was delighted to see the presence of NIC across the country through its various applications and projects and he expressed the desire to visit NIC soon again for reviewing State projects. The visit of MoS was a special and reinvigorating experience for the officials of NIC.

By **ANIL RASTOGI** with inputs from **P&M DIVISION**



MOS TWEETS

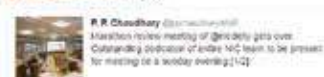
P. P. Chaudhary (@ppchaudhary) · Nov 13
Inaugurated the Video Conferencing Center 'Ganga' at @nicdelhi Headquarters in New Delhi.

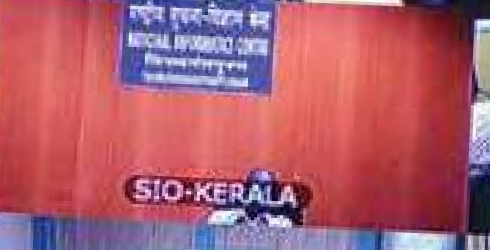


P. P. Chaudhary (@ppchaudhary) · Nov 13
Looking forward to reviewing @nicdelhi, the prime builder of e-government applications in the country at its New Delhi HQ today



P. P. Chaudhary (@ppchaudhary) · Nov 13
It is heartening to see the critical role silently played by @nicdelhi in fulfilling @narendramodi ji's vision of @DigitalIndia. [2/2]





Gurugram, Haryana:

Raising the Benchmark of District Informatics

Several ICT based activities have taken place in Gurugram for better eGovernance. The District has pioneered many innovative initiatives such as GIS interventions, usage of Unmanned Aerial Vehicle (UAV) for Land Records Management, Urban Planning etc. which have raised the benchmark for District Informatics beyond the conventional implementations of e-Governance applications.



ANJALI DHINGRA
Technical Director & DIO
anjali.d@nic.in



VIBHU KAPUR
Scientist-D & ADIO
vibhu.kapur@nic.in

Edited by
VIVEK VERMA

In the past few years, District Gurugram (earlier known as Gurgaon) has witnessed many ICT initiatives that have raised the benchmark for District Informatics. Over 40 e-Governance initiatives are operational in the district under the Digital India Programme, various Central & State Mission Mode Projects (MMPs) and District level initiatives as a part of District Informatics, Sectoral Development Informatics and Panchayat Informatics. However, District Gurugram presents some unique scenarios, opportunities and challenges that make it necessary for the District administration to harness the power of ICT and adopt unique digital interventions, thus making IT an important tool of aid in administration. Some of these include:

- GIS Interventions and usage of UAV for Land Record Management, Urban Planning etc.
- Development of four villages adopted by the Hon'ble President of India under Smart Model Village initiative.
- Inauguration of Haryana Swarn Jayanti Utsav by the Hon'ble Prime Minister.
- Development of Babupur Gram Panchayat as one of the Model e-Panchayats in the Country.

GIS INTERVENTIONS FOR LAND RECORDS MANAGEMENT

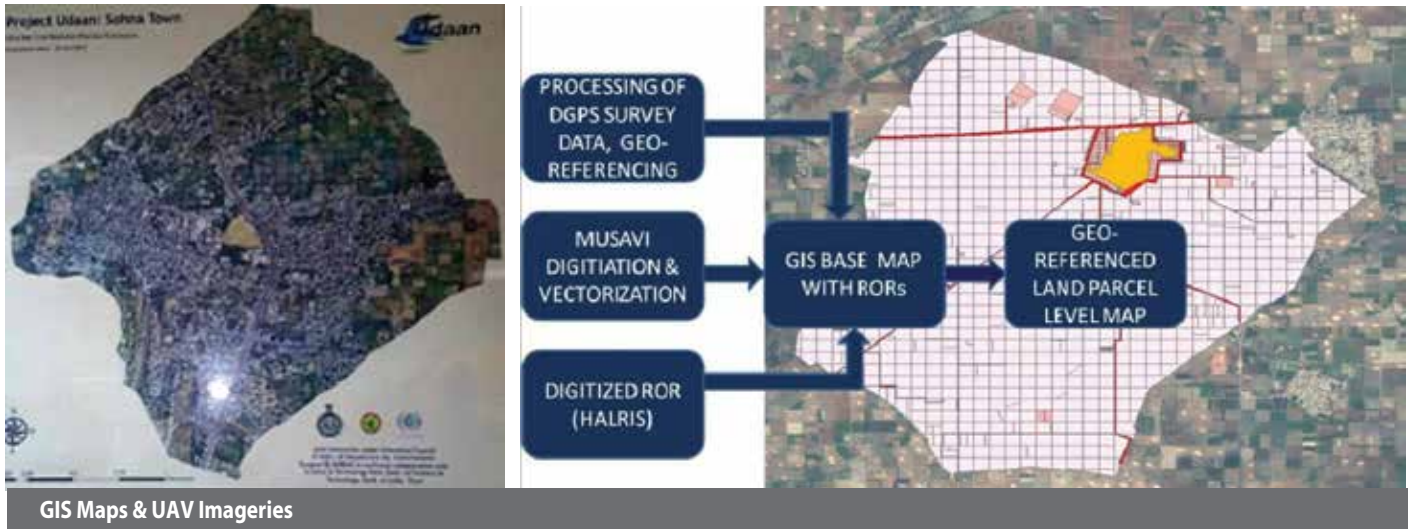
Every inch of land in Gurugram is worth a fortune and combined with the large number of land transactions, (approx. 400-500 per day), outdated records and maps pose a huge challenge in the management of Land Records on a



“Globally benchmarked cities have used mapping as an effective tool to address governance and development issues. District Administration & NIC, Gurugram have tried to develop GIS protocols for not only addressing governance issues, but also for reducing information asymmetry. This approach has given tremendous dividends in Land Records Management. I should place on record that NIC Gurugram has been central to the conceptualization and implementation of the project.

T.L. SATYAPRAKASH, IAS
Deputy Commissioner, Gurugram

real-time basis. As a result, there were a large number of litigations around the



ownership of land. To address the issues, the following exercise was undertaken by the District Administration in collaboration with NIC Gurugram:

- As a first step, the textual data related to land records from Year 2000 onwards Record of Rights (RoRs) were 100% updated using NIC's Haryana Land Records Information System (HALRIS) in a new IT Jamabandi Lab established for the purpose and linked to Haryana Registration Information System (HARIS) (Property Registration) to capture mutations of land at source. Manual ROR data between Year 1957 and 2000 is being scanned, digitized and is kept in annotated format to facilitate decision making.
- A GIS Framework was created in collaboration with all concerned stakeholders viz. District Revenue Office, NIC Gurugram, Haryana Space Application Centre (HARSAC) and Science & Technology Park, Pune for producing accurate and updated geo-referenced revenue maps at Land Parcel Level in conjunction with up-to-date RoR as a major step towards Conclusive Titling. A new GIS Lab has been established for the purpose. Tertiary ground control points were re-established through G-Triangulation survey to create a high precision mechanism along with State's network of primary & secondary GCPs for demarcating parcel level boundaries using GIS and UAV technologies (5 cm precision).
- A PoC successfully validating above GIS framework was conducted for village Hassanpur in Tehsil Manesar, District Gurugram. Using the above GIS Framework, the difference between the RoR and actual area of Tehsil Manesar, was considerably minimized from 7.39 % to 0.01%, thereby lending a very high credibility to the framework as a major tool for conclusive titling.
- The above GIS Framework along with UAV derived imagery is also being used for various other thematic applications including power grid, crop survey, household indexing and gradient analysis for flood etc.



SMART MODEL VILLAGE INITIATIVE BY RASHTRAPATI BHAVAN

On 2nd July, 2016, the Hon'ble President of India adopted four villages of District Gurugram viz. Alipur, Dhaula, Harchandpur and Tajnagar, for the Smart Model Village Initiative by Rashtrapati Bhawan via video conference. The Hon'ble President's interaction with villagers in remote sites was organized and coordinated by teams of NIC Delhi, NIC-HRSC and NIC Gurugram. Since then, these villages have been completely enabled with Wi-Fi. CSCs have also been established and VLEs have been trained on G2C, B2C services, digital payments etc.



INAUGURATION OF HARYANA SWARN JAYANTI UTSAV

Hon'ble Prime Minister of India, Shri Narendra Modi inaugurated Haryana Swarn Jayanti Utsav at Gurugram on 1st November, 2016. The event was attended by Hon'ble Chief Minister of Haryana, Chief Secretary, Administrative Secretaries, Elected Representatives and thousands of people at Tau Devi Lal Stadium, Gurugram. NIC Gurugram extended dedicated support in establishing IT control rooms for Hon'ble Prime Minister. A media lounge was set-up with massive ICT infrastructure including 100 MBPS connectivity through BSNL for the event. e-Secretariats were also established for the district administration and organizers at the venue during the preparations for the event. DDG & SIO, NIC Haryana, presented tableaus showcasing e-Governance initiatives to the Hon'ble Prime Minister and other dignitaries.

BABUPUR MODEL E-PANCHAYAT

Ministry of Panchayati Raj, Government of India, selected Babupur gram panchayat, Gurugram as one of the ten



Glimpses of Babupur Model e-Panchayat

Panchayats in the country for development as a Model e-Panchayat. Panchayat Enterprise Suite (PES) applications have been set-up in Babupur by NIC Gurugram. In a first of its kind initiative, geo-coordinates and photographs of panchayat assets have also been uploaded using mAsset App developed by Panchayat Informatics Division, NIC Delhi. As a result, Babupur Gram Panchayat not only has a website of its own, but its Accounts, Assets and Jamabandis are also completely on-line.

SUMMARY

The district has seen explosive growth in the past years and keeping up with the pace of development is no mean feat. Overcoming the challenges of District Gurugram, the District administration along with NIC Gurugram and other stakeholders has grown beyond conventional implementation of e-Governance applications to experiment successfully with GIS technologies, UAV etc. to address the issues related to land ownership litigations, crop surveys, urban planning, flood management, planning during high profile events etc. In addition, Babupur Gram Panchayat has emerged on the national map as one of the ten model e-Panchayats in the country. Further, working with NIC Gurugram, the District

has hosted some high profile events including Smart Model Village initiative by the Hon'ble President of India, Haryana Swarn Jayanti Utsav Inauguration by Hon'ble Prime Minister and many others. DIO/ ADIO Gurugram have been awarded for their dedicated technical support in the Year 2013 and 2014 on the occasion of Independence Day and Republic Day respectively. G-Triangulation Project jointly undertaken by District administration and NIC Gurugram has won the National Award for E-Governance - GOLD for the Year 2016-17 under Category "Innovative Use of GIS Technology in E-Governance". The award will be presented at the 20th National Conference on e-Governance to be held in Vishakhapatnam on 9-10th January, 2017.

The GIS initiative of District Gurugram has the potential to be scaled up to the National Level and may be taken up for replication across the country for better delivery of e-Governance services.



DIO & ADIO Gurugram receiving award from Hon'ble Governor of Haryana at Republic Day celebration.

For further information, please contact:

GHAN SYAM BANSAL
DDG & SIO, NIC State Centre
New Secretariat Building, Ground Floor
Sector 17E, Chandigarh
Email: sio-hry@nic.in
Phone: 0172-2711642

East Godavari, Andhra Pradesh:

Harnessing ICT Successfully For e-Governance In The District

East Godavari NIC Centre provides ICT based solutions to the District Administration and various Central, State and Quasi Government offices located in the district. It is the first district in the Country to utilize Aadhaar based biometric authentication services for 'Government To Citizens (G2C)' Applications.

SYED USMAN
Scientist-D/ DIO
syedusman@nic.in



CH. V.B.S. SUBBARAO
Scientist-C/ ADIO
chvbs.rao@nic.in

Edited by
R. GAYATRI

East Godavari District Centre of NIC was established in the year 1988 and since then it has been extending its ICT based services to the District Administration and to various Central, State and Quasi Government offices located in the district.

East Godavari District is the first district in the Country to utilize Aadhaar based biometric authentication services in 'G2C' Application.

KEY ICT INITIATIVES

Online Progress Card for Government School Students

A web-based application for entering the examination wise, class wise and student wise marks has been developed. It allows various Master list entries like student, school, class and examination. It can also provide district, division, school, mandal, subject and student-wise marks dissemination report. Functionality for generating bar chart based Progress Card and pie chart-based attendance reports has been added and the entire application has been revamped with new parameters such as class medium-wise unique admission number etc.

Court Case Monitoring System (CCMS)

A software module has been developed by the District Centre for monitoring various courts cases pending in Apex Courts, Tribunals, High Courts, NRHMs etc. The counter-filing status, para-wise remarks sent status, disposal status, contempt status and appeal status of each case can also be known from the web application. It also alerts respondents about the next hearing date, with the help of the liaison officer who has the provi-



“

Aadhaar enabled services, coupled with ICT systems, is the need of the present day. East Godavari has pioneered implementation of Aadhaar based services in all Government Departments. NIC East Godavari is playing a pivotal role in developing and implementing services. Further, spreading ICT in public services to improve accessibility and transparency is one of the main strategies of the district.

H. ARUN KUMAR, IAS
District Collector, East Godavari

”

sion to enter the next hearing dates, disposal status and appeal status of each case. Provisions have also been made to enter the interim judgments of each case.

Blood Bank Web Application & Mobile App

This application was developed for monitoring the blood stocks availability at the Blood Banks located around the district.

This application is very useful for the District administration, District medical and health officials and the citizens. Blood Banks' and blood group wise blood units' availability reports can be generated and a cross-platform mobile App has also been developed for this purpose. Activities of each Blood Bank can be monitored individually by the District administration and medical and health officials using this web application.

District Web Portal

NIC District centre has developed and maintains the official web portal of East Godavari District <http://eastgodavari.nic.in>. The portal provides various useful information and also is a one point source for accessing various web applications developed by the District Centre. It contains various informative pages on District profile, places of interest, RTI Act, population statistics, contact numbers and various important citizen centric information.

about various crime alerts, district police information, good detections, crime awareness and contact numbers of District, Divisional, Mandal and Stations level officials are available on the website. Google Charts services has been integrated with the Website for displaying the dynamic organization structures of District and divisional level police offices.

Water Tax Demand Generation System

The crux of the application is to fetch the survey numbers data and year-wise Pahani/ Adangal data from the Web Land database through web services. Village-wise revenue survey numbers can be fetched and stored in the local database. Survey number and year-wise Pahani/ Adangal/ Crop Data, as well as the Fasl-i-wise data can also be fetched and stored in the local database. Water Tax demand is generated and can be made online through Meeseva. This was inaugurated by Hon'ble Chief Minister on 29th December, 2016.

- Medical and Health Department
- NTR VidayMitra
- UNICEF Program Coordinators
- Recruitment of Ophthalmologists for District Blind Control Society
- Data Entry Operators' Recruitment for Department of Jail

DBT Scheme of Government

East Godavari is one of first 43 pilot districts selected across the country for the prestigious Government of India scheme, Direct Benefit Transfer (DBT). Since 1st January 2013, DBT has been operational in East Godavari District. Union Minister of Rural Development visited East Godavari District and inaugurated the DBT scheme implementation platform. The software modules developed for implementation of the DBT Scheme are as follows:

- Deepam GAS connections monitoring system for DBT LPG implementation



East Godavari District Website



Collector Dashboard

District Collector's Dashboard

Collector's Core Dashboard works as a tool for monitoring all the tasks, works and developmental activities being undertaken in the district. Department-wise performance indicators are shown in the form of the different types of live graphs. Seamless integration with various department databases has been carried out in this application making it very quick to use. In addition, Excel file uploading facility has also been provided.

District Police Website

The website has been developed for the benefit of the general public. Videos

Recruitment Management System

The District Centre has developed web modules for accepting applications from applicants for various posts to be filled in the departments. The Web application was incorporated with all the recruitment rules specified by the departments.

The departments that use the module for Recruitments are:

- Social Welfare Schools
- Disabled Welfare Department
- Horticulture Dept. Phase-1 and Phase-2
- Revenue Department (ST/SC Backlog Posts)

- Farmer information management system for input subsidy distribution
- District UID Database – UID search utility
- JSY beneficiaries' management system
- LPG customers' management information system
- NPIC mapping details information database
- MIS for bank camps conducted

Election Software Modules

A software module was developed for the 3 phase randomization and deployment of polling personnel, micro observers, zonal

officers, route officer and other required polling staff for conducting the General Elections, 2014. Statutory orders of 1st Phase, 2nd Phase and 3rd phase randomization of polling personnel were generated. Statutory Orders for 1st phase and 2nd phase randomization of micro observers were also generated using this software module.

A software module was developed for 3 phase randomization of electronic voting machines (EVMs). In the 0th phase randomization, parliamentary and assembly election-wise allotments were done. In the 1st Phase randomization EVM Allotment, constituency-wise allotment was done while in the 2nd phase Randomization, polling station-wise allotments were done using this software module in addition to all the statutory allotment orders pertaining EVMs.

A software module was also developed for 2 phase Randomization and deployment of Counting Staff. Required statutory reports and allotment orders were generated using the software module.

Apart from the General Elections, 2 other local body elections were held during May 2014. Separate software modules were developed for municipal elections and for ZPTC/ MPTC Elections 2014. All the statutory Reports and disseminations pertaining to these two elections were generated using said software modules.

GPS Based Vehicle Monitoring System for Medical & Health Department

A web application for GPS based Vehicle Tracking System has been developed. The application captures data from GPS devices installed in vehicles. Daily trip sheets, time to time locations, vehicle odometer readings etc can be noted using this application. A TCP listener is developed for auto capturing of data from GPS devices. Google Map services was integrated and Panorama service of Google Maps is being used to find out the location of each vehicle.

Digital India Program

As a part of the Digital India week Programme, organized between 1st to 7th July, 2016, District, Block/ Mandal and Gram Panchayat Level Events were

conducted as per the prescribed schedule. All the reports were uploaded to Digital India website. More than 10 thousand digital lockers were opened during the programme. A 2K run was organized for the promotion of the Digital India Programme.

E-Office

With the help of NIC-Hyderabad, a one day workshop on e-office implementation was conducted in the East Godavari District Centre of NIC. Continuous day to day training on different modules of e-Office has been provided to all the revenue staff and officers of East Godavari district. E-Office has been rolled out in around 78 departments in East Godavari District. This application is being implemented at all the Revenue offices right from District to the Tehsil Level.

Land Records Management System WEBLAND

A web-based land records application, WEBLAND has been developed to store land records digitally. Modifications have been made to the database and data of nearly 60 mandals has been converted from ORACLE 8i database to SQL Server database and successfully ported to the SQL Server database. The application is now operational. District Centre has been providing the technical support to all the Mandal, Division and District level officers in implementing the digital signature based applications.

OTHER IMPLEMENTED/ DEVELOPED SOFTWARE

- MIS for Swatch Sankalp Villages
- Pilgrim Management System for Annavaram Devasthanam.
- Land Records 6A and 22A information dissemination.
- MIS for Revenue, Sadassulu
- MIS for Convergence Meetings Monitoring
- Petition Monitoring System & call centre management
- DIET-Bommuru, Government of AP Website
- NIC-SMS Gateway Services Integration
- Skill Development Registration and

Enrollment

- District Blind Control Society website
- Web application for “Godavari Maha Puskhar-2015”
- Integrated Socio-Economic Survey Application (ISES)
- REAL Craft Project (Coastal Security Project)
- Mother and Child Tracking System (MCTS)
- CourtNIC, e-Court Information Systems:
- National Animal Disease Registration System (NADRS)
- MEESEVA (a citizen centric services oriented portal of government of AP)
- Debt Waiver software module
- National Food Security Act software module
- Loan Chargers module of Webland
- Sarkar Bhoomi software module
- Various NKN Nodes (JNTU, RMC Kakinada, AKN University)
- MEEKOSAM Citizen Grievance Monitoring portal
- Electronic Public Distribution System (EPDS)

SUMMARY

The NIC District Centre has made a significant contribution in providing e-Governance solutions to the District Administration. However, with new challenges rising up to the horizon every day, the task of the Centre is far from over. It will continue to take adequate steps towards making the lives of the general public easier and simpler by the services and products it provides with the prime objective of making the process of e-Governance more intuitive and accessible.

For further information, please contact:

SYED USMAN
District Informatics Officer, NIC
Collector Office, Kakinada
East Godavari, Andhra Pradesh
Email: apeg@nic.in
Phone: +91-0884-2378904

Indian Customs EDI Systems (ICES): Doing Business In International Trade Made Easier

The Indian Customs EDI Systems (ICES) automates more than 98% of India's Imports and Exports and is a major catalyst in speedy and transparent Customs clearances at Air Cargoes, Sea Ports and Inland Custom Stations. The dynamics of the trade have been diligently incorporated in the form of software with enough scope for future scaling up and provisioning for changes in Business Logic and Government policies.

SANJAY GARG
Sr.TD & HoD
garg@nic.in



J.S. SACHDEVA
Technical Director
jaswin@nic.in

Edited by
MOHAN DAS VISWAM

National Informatics Centre undertook a major initiative in the field of International Trade in the year 1992. A Feasibility study was conducted jointly by NIC and Department of Revenue to automate the procedures of Indian Customs at various International Trade locations across the country. The Indian Customs EDI Systems (ICES) was the outcome of this revolutionary study and its subsequent follow up. A more detailed requirements analysis at the New Custom House, Delhi Air Cargo, was conducted in April, 1994 and this formed the basis for the pilot version of ICES, launched in the year 1995.

OBJECTIVES

The primary objectives which propelled the Application Development included:

- Prompt response to the needs of the trade. It would be an important part of improving ease of doing business.
- Computerize maximum Customs related functionality and procedures. At the same time, the requirement of Transparency in working would be taken into account. The various levels of Customs Officers would be accountable for their actions through an easily accessible process.
- Minimize personal interaction of Trade with Customs officers and various Government agencies like DGFT, EPCs, Ports, Airport Authority of India and Banks. This has been achieved with a robust message exchange mechanism amongst various stakeholders.
- Provide the mechanism for retrieval of consolidated information from various Custom locations to have a holistic view and make useful policy related economic decisions nationally.
- Sharing useful information with

various agencies associated with Export and Import related statistics and investigation.

Currently, the system is in operation at more than 140 locations throughout the country.

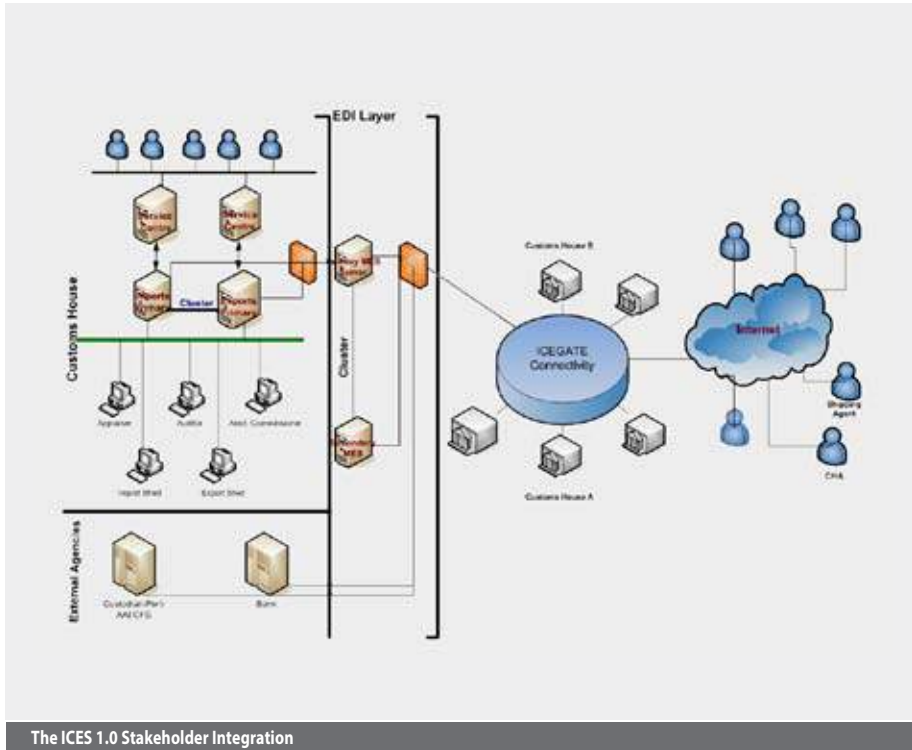
ABOUT ICES

ICES comprises of two main sub systems, Indian Customs EDI system/ Imports (ICES/I) and Indian Customs EDI System/ Export (ICES/E). ICES/I is used for processing of Bill of Entry and ICES/E for processing of Shipping Bills. The Exporters, Importers and Custom House Agents (CHAs) transmit Bills of Entry, Shipping Bills and other related documents via the Service Centres located at the various Custom Houses and from the comfort of their premises using ICEGATE, a portal that provides e-filing services to the trade and cargo carriers and other clients of Customs Department. Subsequently, they are submitted to the Customs computer system for clearance. The trading community is not required to travel physically to the Custom House for submitting the documents except at the last stage for physical examination of goods, and for taking delivery.

The Custom House Agents use the Remote EDI System (RES) which is a standalone software package for preparation of Bill of Entry and Shipping Bills and other related documents. It has been developed by NIC as part of Indian Customs EDI System.

ICES 1.5: THE UPDATED VERSION

Issues like distributed deployment and high setup and maintenance costs led to the Migration from ICES 1.0 to ICES 1.5. A major exercise was initiated in 2009 to migrate the then existing decentralized version of the ICES Application running at various sites to a single, uniform centralized software which culminated successfully on June 9, 2009 with the launch of



the Pilot version of the ICES 1.5 or Central Server based application. Subsequently the existing sites were migrated to the Centralized platform with minimum inconvenience to the various stakeholders. The thought process behind the activity involved the following:

- To have built in Multi Location Functionality.
- Single Database with Partitions for users to access data only for their location.
- Centralized maintenance and updation of the software.
- Faster and better communication with external stakeholders, banks etc.
- Integration would lead to a better response time in case troubleshooting is required.

MAJOR FEATURES

- ICES 1.0 migrated to Oracle 10g Database Server/ Oracle 10g Forms/ Reports and deployed over HP/ UX
- Part of consolidation project of CBEC
- Deployed from Data Centre and accessible through high speed MPLS Wide Area Network (WAN) at Custom and Central Excise field formations number-

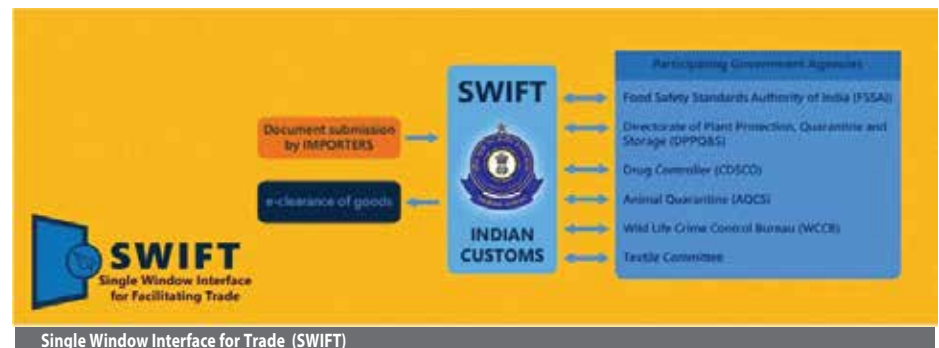
ing around 582 offices

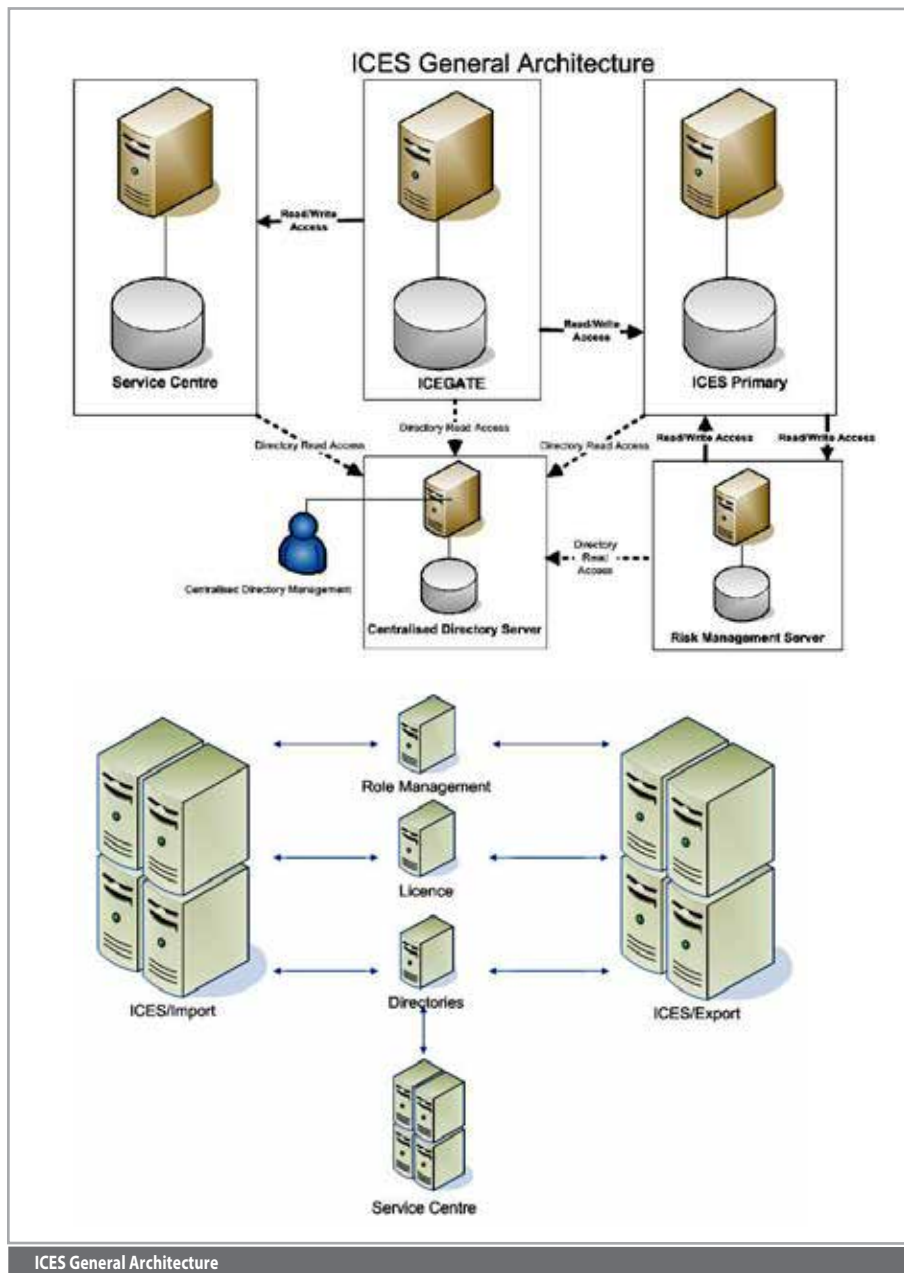
- High Availability/ resilient Infrastructure with Data Centre and Business Continuity at VSNL GK-1 and Bangla Sahib Marg, Delhi & DR Site at Chennai
- Single web based interface to users
- Tight integration with ICEGATE (Indian Customs & Excise Gateway)
- All sites provided with thin clients and application access over CITRIX.

ADVANTAGES

- Single sign-on and central management of sites/ users by National System Manager
- National System Manager to designate the Site System Manager
- Improved User Interface on Website

- Consolidation of Data for National Level MIS
- Centralized Directory Management
- Centralized License and Bond Management
- Accuracy, transparency, accountability and better supervision
- Reduced interface between officers and trade
- Standardized procedures across the country
- Reduction in manual administrative processes resulting in fewer errors and no duplication
- Harmonized business relationships with Customs Community members, namely Ports, DGFT, Airlines, Container Depots etc
- Electronic clearances provided quicker cargo releases, resulting in reduced dwell time
- Reduced cost on processing documents
- Electronic messaging resulting in minimized data capture
- Secure data sharing between different agencies
- Accountability through Time-Stamping
- Successfully running at more than 140 locations across India.
- Customs Duty worth 700 crores being collected across the country via ICES Application daily.
- Around 12 Lakhs documents are processed monthly.
- SMS/ Email based update on Status of Document to Importers / Exporters
- Module for Return of State Levy is made by NIC, on behalf of Ministry of Textiles
- Deferred Duty Payment for specified Importers registered AEO.
- Export Duty Drawback benefits being





Window' would allow importers and exporters to lodge their clearance documents online at a single point only. Required permissions, if any, from other regulatory agencies would be obtained online without the trader having to approach these agencies.

The Single Window Interface for Trade (SWIFT), would reduce interface with Governmental agencies, dwell time and the cost of doing business. The objectives of SWIFT are in line with two key programmes of Government namely 'Make in India' and the 'Digital India' Initiative.

- Migration of the Existing ICES Application to Oracle 12c environment.
- E-Signing of Document
- Implementation of Single Window Interface in Exports
- OTP Based Login and Processing of Documents by Customs officers and other users
- Changes pertaining to GST to be incorporated in conformity with the announcement of relevant Act.

FINAL WORD

NIC has taken a diligent care of the complete ICT requirement of more than 98% of the International Trade of India for more than 20 years. There are other stakeholders also involved at certain stages but the Domain expertise obtained by the NIC team over the years has been instrumental. The partnership between the Central Board of Excise and Customs and the National Informatics Centre has flourished over the years and will continue growing stronger in the years to come.

paid of around Rupees 2000 crores per month, nationally.

- Return of the State Levy in Exports, for the Documents processed is ready to be paid to the tune of Rupees 300 crores.
- System Manager to assign roles to User to access ICES application.

AWARDS & RECOGNITION

The prestigious World Customs Organization (WCO) was awarded to NIC for its contribution towards achieving the goal of Digital Customs through the ICES Application, at New Delhi.

The ICES development team members were also awarded certificates of merit for their support towards the timely implementation of the Single Window Application, a major landmark in Trade Facilitation.

THE WAY FORWARD

As part of the "Ease of Doing Business" initiatives, the Central Board of Excise & Customs, Government of India has taken up implementation of the Single Window Project to facilitate trading across borders in India. The 'Indian Customs Single

For further information, please contact:

SANJAY GARG
Sr. Technical Director & HoD
Indian Customs EDI System (ICES) Division
NIC, CGO Complex, Lodhi Road
New Delhi 110 003
Email: garg@nic.in
Phone: 011-24305263

Online Rohtang Pass Permits Issuance System: Supporting The Care For Environment

To make it easier for the Rohtang Pass commuters, the payment gateway has been integrated with the system so that all the charges can be paid online and the permit is issued on successful receipt of payment by the Department. This web application is a unique mode of getting permits.

AJAY SINGH CHAHAL

Scientist-F/ SIO
ajay.chahal@nic.in



ASHISH SHARMA

Scientist-B
s.ashish@nic.in

Edited by
VIVEK VERMA

At an elevation of 13,054 ft, the world famous Rohtang Pass serves as the gateway to Lahaul and Spiti valleys in Himachal Pradesh and the motorable road to Leh-Ladakh. Situated at 53 km from the tourist town of Manali, it connects Kullu valley with Lahaul and Spiti.

In the year 2015, the National Green Tribunal (NGT) laid the guidelines for maintaining the eco-system of Rohtang Pass to be enforced by the District Administration for tourists and visitors. As per these guidelines, a cap was placed on the number of vehicles visiting Rohtang Pass for tourism purposes. One of the conditions of these guidelines was to maintain a computerized record of the vehicles visiting the Pass either for tourism or for going to the Lahaul & Spiti valley or beyond.

The task of the software development was assigned to NIC Himachal Pradesh, and the system was developed in the year 2015, without the payment gateway (as , the number of daily permits was fixed but no fees were levied at the time). Later it was integrated with a payment gateway so that the tourists could pay the permit fee online and get permits on a first come first served basis.

In this solution, a user can get a vehicle permit from his/ her desktop from anywhere in the world on first come first served basis without any human intervention. In the year 2016, NGT amended its guideline and declared that each vehicle has to pay a charge to the Transport Department. To make it easier for the commuters, a payment gateway was integrated so that all the charges can be paid online and the permit is issued on successful receipt of payment to the department. This web application is the only mode for getting permits.



“To meet the time-limits and guidelines set by the NGT for restricting the flow of vehicles to the Rohtang Pass, the District Administration could only think of NIC Himachal Pradesh to provide a robust, transparent and citizen friendly software solution and they have done it! The software has been very useful to the citizens, tourists and travel operators as the entire service is provided online.

YUNUS, IAS
Deputy Commissioner, Kullu

OBJECTIVES

Although the basic aim of the software solution is the effective implementation of the NGT guidelines, another important objective is facilitating the tourists and taxi operators to get online permits in an easy manner without visiting any office. Besides, the software helps to monitor the vehicular traffic on the Rohtang pass and enables cashless transactions as fees are paid online only.



Rohtang Permit website homepage



Rohtang permit sample

THE SOFTWARE SOLUTION

The tourists, residents or taxi operators can visit the website of the District Kullu at <http://hpkullu.nic.in> or the Transport/Himachal Pradesh Government websites at <http://hptransport.nic.in/> <http://himachal.nic.in> and apply for the Rohtang permit. They have to enter the vehicle details like registration number, type of vehicle, commercial or personal vehicle, driver name, the number of passengers, mobile phone, email, diesel or petrol fuel, ID proof and date of visit. The system shows the number of permits available for sale and once the user pays the online fee shown by the system, the permit is issued and sent through Email/ SMS too. The user can then print the permit/ reprint the permit or apply for a refund in case the transaction fails.

The permit in printed format or the SMS received on the mobile can be shown at the barrier to proceed to Rohtang pass or beyond. The bar code enables faster scanning and checking of permits at the barrier. The District Administration can block a date for no-issuance of permits, decrease the number of available permits besides generating various MIS reports.

BENEFICIARIES OF THE SYSTEM

Environment:

It is a proven fact that a mountain's ecosystem is about two and half times more vulnerable to environmental change and the impact is felt downstream. With the clean and balanced ecosystem the human beings stand to benefit by achieving a better quality of life and standard of living.

Citizens and Government:

The main beneficiaries are the tourists visiting Rohtang Pass or beyond, residents of Leh and Lahaul areas, taxi/ tour operators of the region, the District Kullu administration, HP Transport Department and the NGT. Some of the benefits are listed below:

- Easy to get permits in advance, as per availability, for common citizen without human intervention
- Online payment of Fees/ Charges using Credit Card/ Debit Card/ Net banking
- Facility to check the availability of permits for desired day
- SMS and Email based information of permits/ payments to citizens so that they don't have to print the permit
- Self-initiation of refund in case excess payment or permit not issued due to technical issues
- Simple, user-friendly and transparent functional system as all data is shown live while making an application for permit issuance
- The residents or tourists visiting places beyond Rohtang have the advantage that although they have to get the permits, they can get these from their homes without visiting the office at Manali.
- Timely and effective implementation of NGT Guidelines
- No parallel manual system of permits
- Printing of Barcode on permit to check

fraudulent permits and for easy checking of permits at the barriers

- Real-time reporting of Vehicular traffic to Rohtang Pass for traffic management
- Lesser stoppage times at barriers result in less pollution and lesser wastage of fuel due to the idling of many vehicles.
- Lesser additional staff required for managing the permits issue
- The software has provision to control the number of vehicles, fuel and types of vehicles to be allowed and to declare a day as no vehicle day through the software itself, which also announces this on the website for the tourists and taxi/tour operators.
- No crowds and queues of people at SDM office, Manali for getting the permits.

WAY AHEAD

The software has been improved so that when the Rohtang pass is opened to tourists in April/ May 2017, the tourists can pay the Manali Green Tax and other related Municipal taxes online along with the Rohtang permit so that they don't have to wait in queues for payment of these fees while visiting Manali.

For further information, please contact:

AJAY SINGH CHAHAL
State Informatics Officer, NIC
HP Secretariat, Shimla - 171002
Himachal Pradesh
Email: sio-hp@nic.in
Phone: 0177-2624045

DND Services App Of TRAI:

Freedom From Unsolicited Commercial Communication

Subscribers can activate the Do Not Disturb (DND) Services by TRAI by using this App. By activating the DND services, the telecom provider can block/ take action against the numbers from which consumers are getting such calls or messages.



DR. RAKESH GUPTA
Sr. Technical Director
rgupta@nic.in



VIVEK GUPTA
Technical Director
vivek.gupta@nic.in



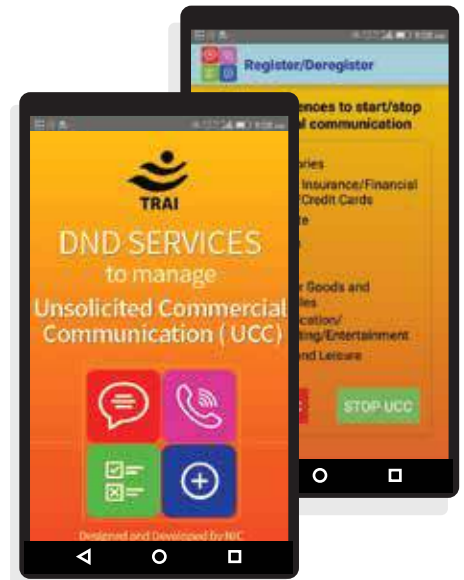
RAMYA RAJAMANICKAM
Scientist-B
ramya.r@nic.in

Edited by
MOHAN DAS VISWAM



Continuous developments in mobile technology have led to a massive acquisition and adoption of mobile devices at a fast pace. Subscribers do not want to receive unnecessary and disturbing marketing calls on their phone. Keeping this as an objective, Telecom Regulatory Authority of India (TRAI) has introduced rules and regulations to stop and avoid such commercial calls. The Do Not Disturb (DND) service has been offered since 2007 followed by Telecom Consumer Call Preference (TCCP) which is adhered by all service providers. To facilitate mobile users and simplify the process further, TRAI has launched the “DND Services” Android mobile App to block unnecessary telemarketing calls and SMS and report complaints for such communications.

DND Services App, designed and developed by NIC, helps Android smart phone users to register their number under DND for handling Unsolicited Commercial Communication (UCC). Subscribers can activate DND with the help of this App. Once the DND services have been activated, the telecom provider can block/ take action against the numbers from which consumers are getting unwanted commercial calls or



DND Services App UI Screens

messages. The App offers various features like enabling consumers to choose their preference of UCC messages they wish to receive, either blocking them completely/ partially or allowing them, escalating complaints, resolution of complaints within stipulated time frame, communication to customer regarding their complain status, etc.

SALIENT FEATURES

DND Services App facilitates the telecom customers to

- Register for DND service

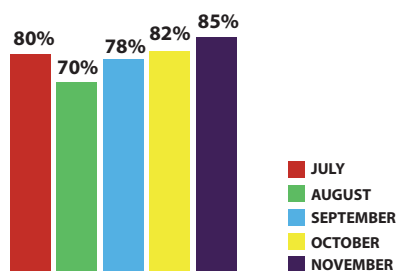


Launch of DND Services App at TRAI, New Delhi

- Deregister from DND service
- Check DND Registration status
- Check UCC complaint status
- Register UCC complaints (Voice/ SMS)

TECHNOLOGY

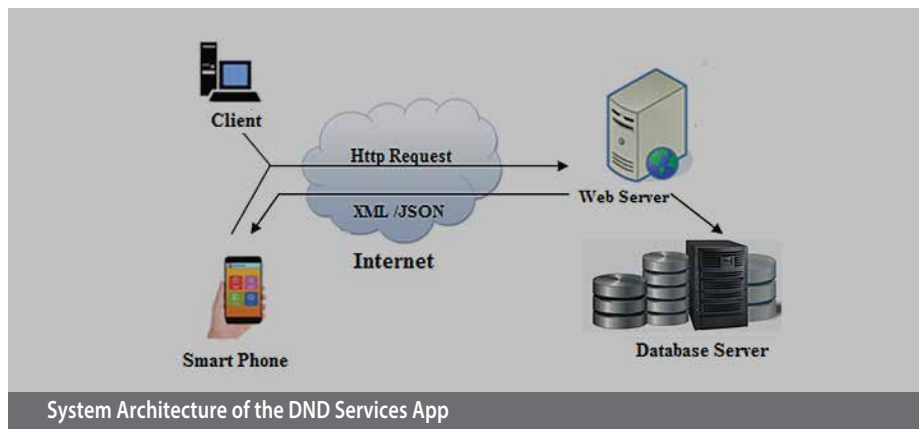
DND Services App uses data from NCCP database to deliver various services. RESTful web services are used for this. These are Representational State Transfer (REST) architecture based web services. The principles encourage RESTful Applications to be simple, lightweight and fast.



DND Services Usage Statistics (July-Nov 2016)

USER FRIENDLY SERVICES

The interface of the App is very user friendly and does not require much user intervention. Subscribers can check their DND status and change their preference category by choosing from the available seven categories. They can also check their Registration Status and Status of Complaints which requires an internet connection. The App also covers various ICT policies, Government's e-Governance to m-Governance efforts, G2C policies, Telecom Consumers protection and handling of UCC.



DIGITIZATION IN INDIA

The DND App aspires to benefit the common citizen primarily as the Government always places citizens as its first priority. Telecom Consumers are the first beneficiaries of the TCCCP, followed by Telecom Service Provider and Telemarketers.

The DND services clearly explain how Government delivers the DND services to the fingertips of its citizens for handling the UCC calls/ SMS. Available on Google App and Mobile Seva App stores, the App's installation will allow users to easily register complaints on unsolicited commercial communications. It is a comprehensive App covering the entire telecom consumer needs against UCC.

As on 30.12.2016, total number of registered telecom customers is 23,71,92,267, of which 20,67,21,218 are registered in fully blocked category and 3,04,71,049 in partially blocked category. A total of 14,46,322 complaints have been registered under the DND services scheme, out of which action has been taken in 14,36,759 cases.

BENEFITS

- Telecom Subscribers have all the services related to DND available just a click away.
- The App has been very effective in empowering consumers in dealing with UCC.
- Easy registration/ deregistration of DND services for the benefit of the subscribers.
- Choosing preferences made simple.
- Easy process for making complaints.
- Availability of complaint status.



“

Do Not Disturb (DND) Mobile App is offered by TRAI to facilitate telecom users to get rid of nuisance calls. This App not only makes convenient way to register preferences but also provides a quick and intelligent way to report about unwanted SMS and calls for taking appropriate action.

ASIT KADAYAN
Advisor(QoS/IT) TRAI

”

SUMMARY

The App plays an important role in making the lives of telecom subscribers easier. It empowers and gives them the ability to protect their privacy and free time from encroachment by marketers with just a single click. In addition, it serves as a comprehensive resource for the DND services initiated by TRAI, allowing subscribers full control over what calls they receive.

For further information, please contact:

VIVEK GUPTA
Technical Director & HoD
TRAI Project Division
NIC, A-Block, CGO Complex, Lodhi Road,
New Delhi 110 003
Email: vivek.gupta@nic.in
Phone: 011-24305813, 24365152

ServicePlus: Metadata Based Framework Enabling Versatility In eService Delivery

A versatile application that allows Government officials and departments to quickly and easily create, format, publish forms, notifications etc., ServicePlus has a simple drag and drop functionality, in addition to many other advanced features, which makes it unique.

Edited by
MOHAN DAS VISWAM

With the increasing reach of ICT penetration to the remotest parts of the country, there has been a growing emphasis by Governments at all levels to enable the citizens and businesses to access services in an efficient, transparent and accountable manner. This emphasis has been particularly reflected on a few major fronts namely, the Digital India Programme of the Government of India, the eDistrict Project, the enactment of Right to Service Delivery Act by many States and the efforts made by State Governments to improve their Ease of Doing Business index. This increased emphasis has resulted in efforts by governments to quickly automate government services. But writing separate software for each service is not only time consuming and a costly affair but also in most cases, the same functionality is required in most of the services. It is against this background that ServicePlus was conceived as a single, multi-tenant platform for quickly configuring services with end-to-end back-end processing.

ServicePlus (<https://serviceonline.gov.in>) is a metadata-based, single, unified, eService Delivery & Grievance Redressal framework that can be configured to rapidly deliver government services to its customers including citizens & businesses. It supports multi-tenancy architecture that enables each tenant to configure their eGovernance services as per their requirement. It supports UNICODE thus enabling services to be accessed in local languages.

Government departments can quickly configure their services in terms of beneficiary profile, submission modes, service charges, payment mechanisms, service delivery modes, application form, service output, notifications, process flow, digital signatures, 2D bar codes etc. using a wizard-like interface.

As a result, citizens can access all services through a single unified portal. They can also track submitted applications, subscribe to alerts etc. An online repository is also available to citizens for maintaining all documents which can be re-used across services.

Both CSC and non-CSC kiosks can be registered for providing services.

D.C. MISRA
DDG & HoG
dcmisra@nic.in



RAMA HARIHARAN
Sr. Tech. Director & HoD
rama.h@nic.in



FEATURES

The major features offered by ServicePlus include the following:

Form Designer

A form builder tool is available within the ServicePlus application to build a multi-lingual form in minutes. The forms could be designed for citizens/ businesses or for officials. Fields with built-in validations can be dragged & dropped. Special fields with pre-determined functionalities are available. Forms can be made dynamic by attaching Java Scripts at required places. Fields can be linked across forms. Form and field level help can also be given to guide the user.

Process Flow Designer

The Process Flow Designer provides the much needed back-end processing of any service. The department can define the list of tasks in a service and map the flow between the tasks. Three types of tasks are available: Applicant task, Official Task and Web Service Task. All kinds of complicated workflows including conditional forking and merging can be configured. Each workflow player in the process flow can have his own form for entering any data related to the processing of a specific application and can be configured to generate intermediate or final documents/ certificates. The workflow players can also be given the option to upload any document and also merge

an uploaded document with a document that is being generated. FIFO mode can also be enabled.

Notification Designer

The Notification Designer provides a facility to configure SMS and emails to be sent to the mobile numbers/ emails mentioned in the application form or to any of the Workflow Players or even to external entities. Both the content as well as the notification triggering points can be configured.

Document Designer

Document templates can be designed using a custom editor. Any data associated with the application, data provided by officials or system data can be embedded in the document. These templates can be used to design custom acknowledgement, output certificate, rejection certificate, intermediate certificate, SMS and email notifications. Enclosures attached by applicant and intermediate certificates generated by officials can be merged with output certificate to give combined document to applicant. Conditional modifications of certificate text based on data entered by applicant or official can also be made. Position of bar code and DSC can be specified. Watermark (as an image) can also be included.

Application Submission

Services can be configured to accept application in multiple modes (In-person,

Kiosk, Online, By Post). List of enclosures to be submitted along with the application can also be configured. Photographs can either be uploaded or captured through a web cam, if available.

Service Charge

Services may be configured with or without an associated charge. Payments can be made multiple times and at different stages of service process flow and using different modes of payment (online, DD, cash, cheque etc).

Activating, Testing and Launching a Service

ServicePlus supports selective activation of service units and launch of service only in the activated units. A service configured in the production server can be tested end-to-end in the activated units. Once user acceptance is obtained, the service can be launched with the click of a button. As soon as the service is launched, all test data used to test the service is automatically deleted. The service becomes visible to applicants only after the service is launched.

Tracking the Application Status

Applicants can track their applications either online or through kiosk or government office (if the application was submitted through kiosk or government office).

Callback Functionality

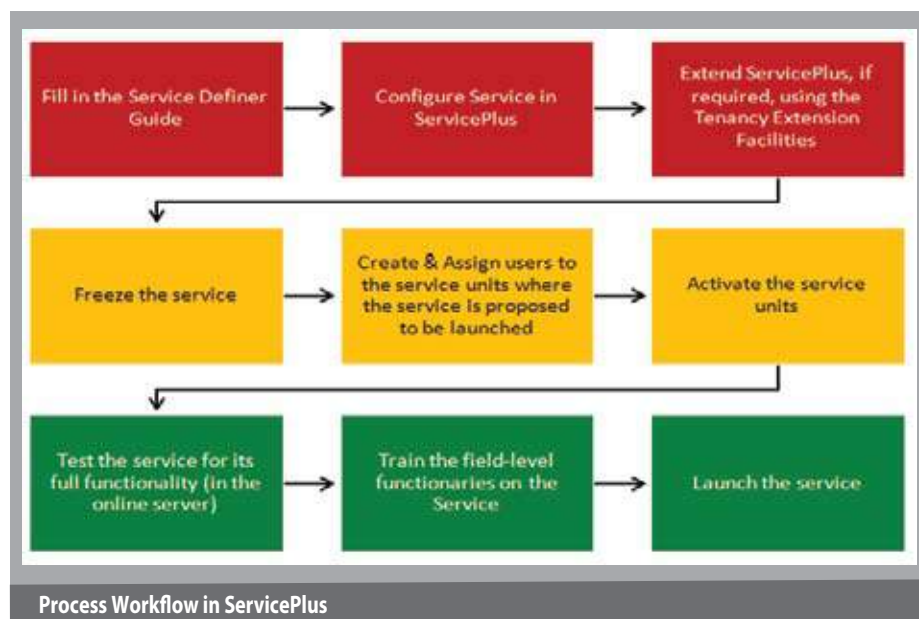
A workflow player can be given the privilege to callback any application in a particular task as long as no action has been taken by the next workflow player. Callback can be used even after delivering a service to an applicant in which case the delivery action is reverted and the issued certificate is cancelled.

Pages Generated by ServicePlus

Separate pages can be defined for each service, for a department or for the entire State.

Integration with External Systems

ServicePlus is integrated with many external systems which can be configured in each service as per the requirements of the service. It is integrated with Payment Gateways (NDML, SBI ePay), CSC Connect, CSC eWallet, eTreasury (Kerala), NSDG/ SSDG, Digilocker, eSign and RAS.



A form designed in ServicePlus

Web Service Integration with other Software Applications

A service can be configured to interact with any other software applications through web service. Web services can be used to populate data in application or official forms or validate the data entered in these forms. Web services can also be integrated at the process flow level by defining a task as a web service task. Both synchronous and asynchronous services can be integrated with a service. A web service task is also associated with a fallback user. This facility allows manual intervention in case the web services associated with the task is not available for extended period of time. By facilitating manual intervention, ServicePlus ensures that applications can be processed in time even if the web services provided by external applications are unavailable.

Reports

A number of generic reports are available. Of particular interest to Government departments is the pendency report. Two types of pendency reports are available: Task-wise pendency report and Hierarchy-wise pendency report. Facility for quickly generating service-specific reports is also available.

Tenancy Extensions

ServicePlus provides the much required flexibility through tenancy extensions to

plug-in code to meet typical requirements of a service. Provision is available to make a form dynamic by attaching Javascripts with required fields and on specific events. MVEL functions can be attached at pre-defined trigger points to override the default functionality of ServicePlus. Both Java Scripts and MVEL functions help in overriding the default functionality of ServicePlus without disturbing its code base. Such functionalities are usually written by NIC State units or divisions while the core software is managed by ServicePlus team.

Digitization & Legacy Services

ServicePlus provides the States the facility to digitize their manual records using the facility of legacy services. Data in legacy services can be queried from the corresponding primary service.

Integration Between Data of Different Services

Through a simple mechanism, data across different services can be accessed/queried thus enabling seamless integration among services.

Grievance Redressal

ServicePlus provides a facility to each State to configure its Right to Service Delivery Act. Citizens can lodge a grievance against a service if they have been denied or if the service was not delivered on time.

A sample of output generated by ServicePlus

IMPLEMENTATION STATUS

So far, 85 services are being delivered through ServicePlus by 11 States. More than 4.5 million applications have been received so far and more than Rs. 870 million have been collected as revenue from these services.

Shri Adesh Chand Gupta (Scientist-D), Shri S.P. Nautiyal (Scientist-D), Shri N.P. Sreejith (Scientist-B), Shri Ashwin Ayyappan (Scientist-B) and Shri Sajjad Abbid (Scientific Officer-SB) are the other key members of the ServicePlus design and development team of National Informatics Centre.

For further information, please contact:

Ms. RAMA HARIHARAN
Sr. Technical Director & HoD
Panchayat Informatics Division
National Informatics Centre, A-Block, CGO Complex
Lodhi Road, New Delhi - 110 003
Email: rama.h@nic.in
Phone: 011-24360563

Employee Online App: Single Point Resource for Employee Information

In near future, the 'Push Notification' service of EO App will be decoupled and provided as a component or a web service so that it can be reused by other applications.



RACHNA SRIVASTAVA

Sr. Technical Director & HoD
rachna_sri@nic.in



Y V RAMANA

Scientist-D
yvramana@nic.in



ANDREWS VARGHEESE

Scientist-C
andrews.varghese@nic.in



PANKAJ K. KHETWAL

Scientist-B
p.khetwal@nic.in



SUBRAMANIAN M

Scientist-B
ms.mani@nic.in

Edited by
MOHAN DAS VISWAM

Employees Online Mobile App (EO App) has been designed and developed by e-Office Project Division & NIC-DoP&T Division for providing various information such as about Senior officers' appointments & postings orders, as approved by ACC, "What is New" in D/o DoP&T, Holiday list and Directory Listing of all Ministries/ Departments (contact-us info) on a real time basis. Over 4900

IAS officers posted across the country and other Group A central services officers will be able to access details of their ER sheet, APAR, IPR, Postings apart from offer list, Officers at centre, training application status, domestic, foreign training details, Civil list (IAS), vacancy circulars, OMs & Orders etc.

The EO App was launched on 28/10/2016 by Dr. Jitendra Singh, Hon'ble Minister of State of the Ministry of Development of North Eastern Region, Prime Minister Office, Personnel, Public Grievances and Pensions, Department of Atomic Energy and Department of Space, in the presence of Shri Bhaskar Khulbe, Secretary(PMO), Shri B. P. Sharma, Secretary(P), Shri Rajiv Kumar, EO & AS(DoP&T), Dr. Ajay Kumar, AS(MeitY), Smt. Neeta Verma DG(NIC), Shri G. K. Gaur, DDG(NIC), Smt. Rachna Srivastava, Sr.TD(NIC), Shri S. N. Sowpari, Sr.TD(NIC) and other senior officers from DoP&T.

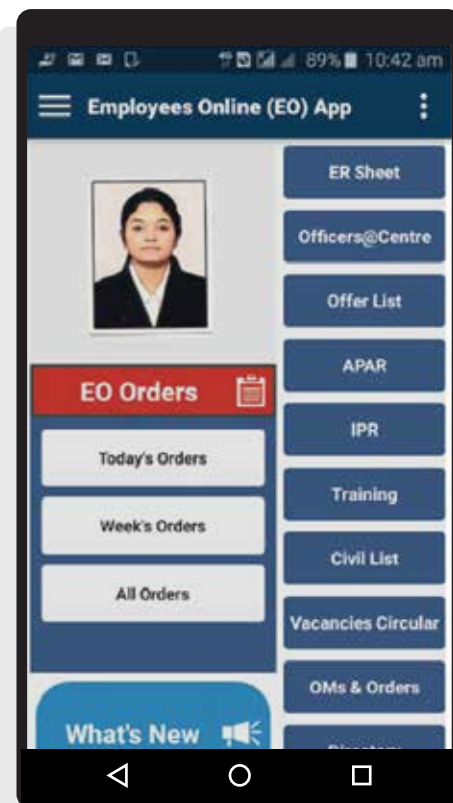
The Hon'ble Minister appreciated the initiative and stated that "EO App is first of its kind to keep one updated about bureaucratic appointments, other orders and circulars of DoP&T and is a step towards transparency in eGovernance. It will also check on the number of repeated RTI Applications filed by

citizens to seek Governance related information as most of the details will be put online for public on real time basis."

EO APP ARCHITECTURE

The data for EO App is being provided by several different backend application systems like DoP&T Personnel, DoP&T Trainings, Circulars and Orders database, eOffice SPARROW etc. Considering the fact, that some of these applications were already in use and all had different authentication mechanisms, it was decided that a centralized architecture (the Middle Layer) should be created to provide the following features.

- Unified authentication mechanism.
- Decoupling of mobile App from departmental web services from the data contributing Apps.



A sample UI Screen of EO App



Dr. Jitendra Singh, Hon'ble Minister of State (P) launching EO App. Others on the dais are Smt. Neeta Verma, DG(NIC), Shri Rajiv Kumar, EO, Shri Bhaskar Khulbe, Secretary, PMO and Shri B. P. Sharma, Secretary(DOPT)

- Single point of contact for better security.

EO APP SERVER (MIDDLE LAYER)

EO App middle layer had been designed as a RESTful API, using the latest technologies, in a secure and optimized manner, to address the three most important aspects of software development.

Security

- All the APIs are accessible only via encrypted channels, TLS.
- Once the user is logged in, using username/ password, each subsequent request will include the JSON Web Token, JWT, for authentication. The password is not stored in the mobile, thus it cannot be stolen.
- Developed as per OWASP guidelines.

Scalability

- The middle layer was developed as a stateless REST API, since there is no session it can be easily scaled, both vertically and horizontally.

Performance

- The middle layer has a caching mechanism, using Ehcache, to cache all the master data, thus reducing the turnaround time.
- The middle layer supports “Conditional GET” request, so that a resource is

not returned unless it has been modified since the previous request. This feature will also reduce the data usage of the mobile.

- The response from the server is compressed using gzip.

BEST PRACTICES

As several backend systems were the source of data for EO mobile App, Web Services were written by individual application providers. Some of the best practices adopted while designing REST API for Backend Data Provider Web services were:

- The backend API should support “Conditional GET” request.
- Wherever the API is returning text response it is recommended to enable compression.
- It is recommended to expose the service URL via encrypted channel only, i.e. HTTPS.
- Maintain versioning of API.
- Use RESTful URLs.
- For text response, provide an option for the client to specify the response format, i.e. JSON or XML, both formats should be supported and JSON can be made as default format.
- Ensure proper usage of HTTP methods.
- Ensure proper usage of HTTP status code.

- Implement the concept of limit and offset when retrieving large set of data.
- Create proper documentation, documentation libraries like Swagger can be used to document your API.
- Application should be stateless.
- Use token based authentication, like JWT, instead of HTTP Basic authentication.
- For the data that serves multiple users, frequently accessed and doesn't change frequently, prefer caching those data.

EO APP (ANDROID & IOS)

Mobile applications are becoming a necessity nowadays for end user satisfaction and for reaching wider target audience with greater ease of access. NIC has developed EO Apps for iOS and Android mobile platforms. These Apps are developed as native applications, hence are more responsive, have better performance and enable instant notifications. These Apps follow the Flat Design and Material design principles for unified user experience on the Apple Sandbox and Android platforms respectively.

Security features of EO App

- The data exchanged between the mobile devices and the server is transferred through TLS channel only. This protects the application against eavesdropping and tampering with or forging the contents of

the communication.

- These Apps are using TLS server certificate pinning mechanism to prevent man in the middle attacks.
- EO App doesn't store the password (LDAP password) of the user in the mobile device and instead JWT token is used for maintaining the session, which is valid for a specific amount of time. This increases the security of the App.
- The JWT Token, used for authentication, is stored in the mobile device in encrypted form only. This prevents the eavesdroppers or man in the middle attackers to misuse it.
- The EO iOS App conforms to the Apple's standard of "App Transport Security". It enforces applications to send network requests over a secure connection. If App Transport Security is enabled for an application, network requests are sent over HTTPS by default. Apple emphasizes its commitment to security and privacy by automatically enabling App Transport Security for applications built with XCode version 7 onwards.

Techniques & Technologies used in EO App

- **JSON Rest API:** The Restful APIs used in this App uses JSON as data exchange format. JSON (JavaScript Object Notation) is being used for data transfer between EO App and the

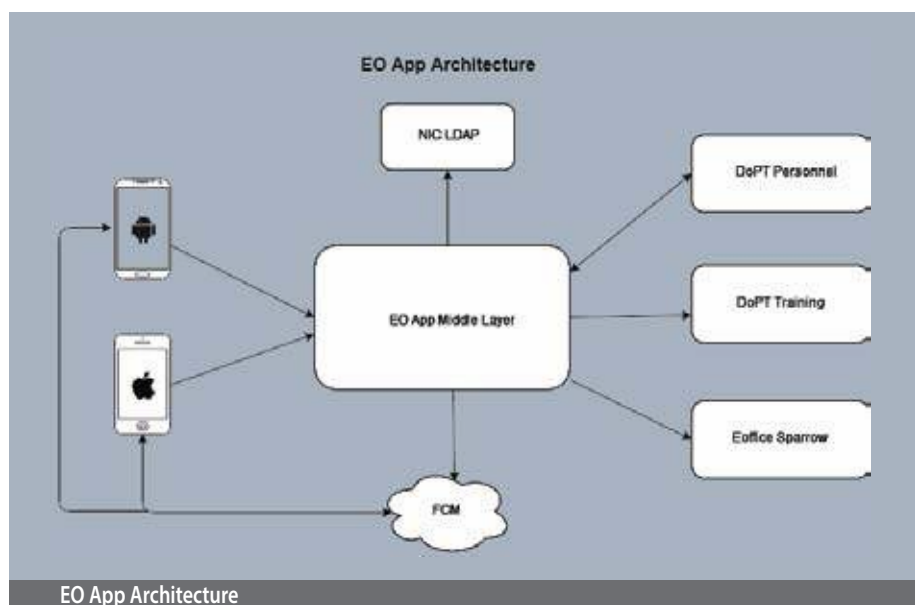


NIC officials and other dignitaries during the launch of EO App

middle layer. JSON is preferred to xml, as it is faster in parsing, lightweight and it has ability to represent complex data types in the form of objects (key-value pairs).

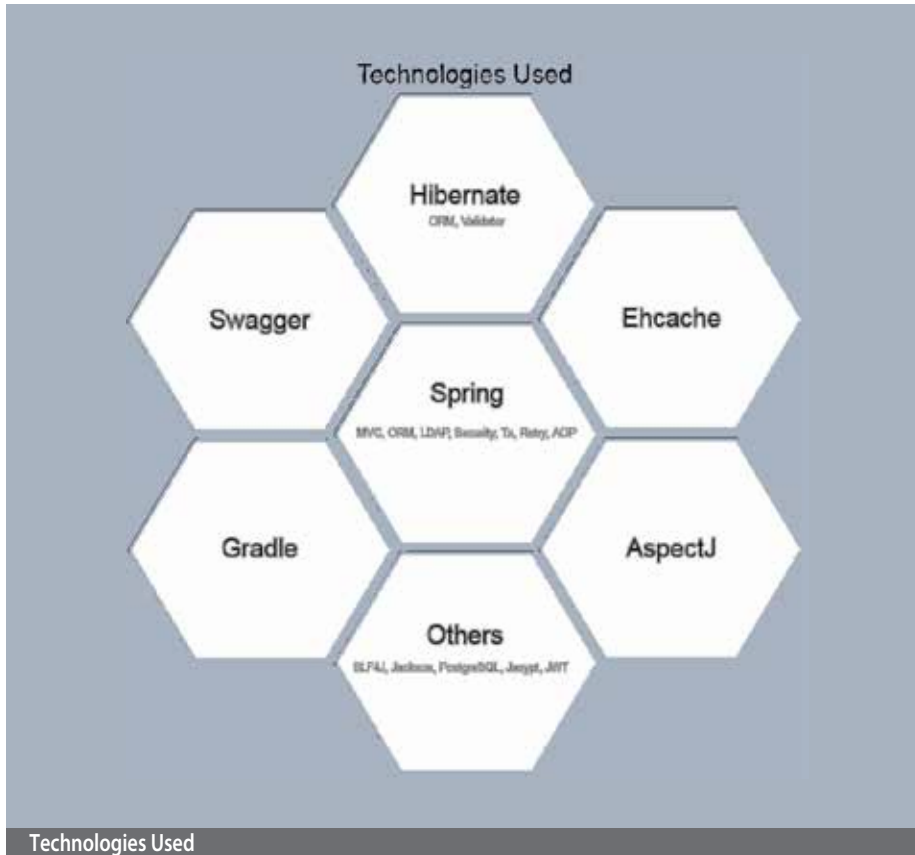
- **Data compression (gzip):** To make data communication faster between EO App and middle layer the data is compressed in gzip format. It provides the effective way to save the consumption of network data and faster transfer of data. The data has been compressed to about 72% of the original size by this App after gzip enabling.

- **TLS certificate pinning:** EO Android App has used TLS server certificate pinning for additional security. It is one of the authentication process in which the client makes a connection to the server and the server responds with its SSL certificate. If the certificate is issued by a Certificate Authority that is trusted by the OS and is already pinned to the client, then the connection is allowed, otherwise the connection does not take place. This prevents Man-in-the-middle attacks, interception and other eavesdropping attacks. The Android App uses password protected bouncy castle key-store to trust and pin the certificate.



- **Push notifications (FCM):** EO App uses Firebase Cloud Messaging (FCM) for push notifications. FCM is a new, improved version of the Google Cloud Messaging API and is known for being cross platform, so FCM makes a natural fit in the firebase suite of features designed for Android, iOS, and other mobile & web applications. It provides simpler client development and Firebase Notifications, a server less notifications solution with a web console that lets anyone send notifications to target specific audiences based on Firebase Analytic insights.

- EO App uses collapsible message, message may be replaced by a new message containing the same collapse key if it has yet to be delivered to the device. This App uses 2 collapse keys (one for



“What’s New” and another for EO Orders).

- EO App uses the topic messaging that allows to send a message to multiple devices that have opted in to a topic (like “What’s New” and EO Orders etc.) subscribed.

- EO App uses the data messages based notification, in which only client App is responsible for processing data messages. That is, the original message is not pushed from the FCM cloud to the device, instead a ping is sent. After receiving the ping, the mobile app polls the middle layer and gets new notifications and hence makes the app more secure.

The first version of EO Android App was released with Pull notification, whereby the mobile App pulls the server, at periodic interval, for any new notification. Since this process was not real time and battery draining, Push notification was used to replace the pull notification service. The push notification uses Firebase Cloud Messaging (FCM) in the latest version. Steps for enabling push notification:

- Registration of the project in Google. Google to acknowledge with providing sender ID and key.

- Whenever EO Mobile App is installed, a token will be shared to it by FCM.

- EO Mobile App will send the FCM token to the EO App Server.

- EO App Server will subscribe the newly registered tokens to a topic, in FCM.

- Whenever a new message is received from DoPT server, the EO App Server will construct a topic data message and send it to FCM.

- FCM will notify all the mobile Apps that are subscribed to that topic.

Features of EO Android App

- **Material design:** EO App has followed the material design. It resulted in the reduction of the overhead cost of designer and UX developers for multiple screen sized devices. As per material design, the App uses just two to three colours mostly to brand the entire App and a single proto-type design can be used for web and mobile.

- **Network library (Volley):** Volley library is used in this Android App for managing networking requests. It provides easier and faster networking requests handling by managing the processing and caching of network requests. It also saves development time by eliminating the need of writing the same network call/ cache code again and again. EO App sends multiple requests to the middle layer and these requests are being automatically scheduled by Volley. It provides transparent disk and memory caching using ET tags. It also allows a powerful cancellation request API, which allows cancellation of a single request or set blocks or scopes of requests to cancel.

Features of EO iOS App

- **Flat design:** EO iOS App has tried to follow the Apple flat design, wherever possible in the App in the given time frame. It resulted in the reduction of the overhead cost of designing for multiple screen sized devices like iPhone, iPad etc.

- **Security for jailbroken devices:** The EO iOS App checks if the App is being run on a jailbroken device or not while launching. If the device is jail broken, then the App will exit, otherwise it will work normally. This increases the security for the App, as it will not allow the App to proceed on any compromised devices for better security.

FUTURE ROADMAP

Currently, the ‘Push Notification’ service is tightly coupled with the EO App middle layer; in future, it will be decoupled and provided as a component or a web service, so that it can be reused by other NIC applications to avail ‘Push Notification’ service. The TLS pinning, currently implemented, is only Server certificate pinning; in future, the client side pinning also can be implemented for additional security.

For further information, please contact:

RACHNA SRIVASTAVA
Sr. Technical Director & HoD
eOffice Project Division
NIC, A-Block, CGO Complex, Lodhi Road
New Delhi-110 003
Email: rachna_sri@nic.in
Phone: 011-24364782

ePayment Services in Goa:

Transport Department, Goa goes Cashless

With the Government of India taking steps to promote online and digital payments, the migration of the services to the ePayment channel represents major strides towards achieving decreased dependence on cash. The initiative by Transport Department, Government of Goa to allow citizens to pay the various fees and taxes online is one of them.



SATESH REDKAR
Scientist- C
satesh.r@nic.in

Edited by
ANSHU ROHATGI

Over the years, the Government of India has taken many steps to promote digitization and e-Governance in the public sphere to promote easy and efficient access to Government schemes and initiatives. Echoing the objective, the Transport Department, Government of Goa launched the following e-payment services during the Digital India Week celebrations:

- Web Wallet Deposit for Dealers
- Monthly Passenger Tax for Commercial Vehicles
- Yearly Road Tax for Commercial Vehicles

Soon, after the announcement of the demonetization of the currency notes of high value by the Central Government, the State Transport Department introduced the following e-payment services to deal with the cash crunch faced by the public:

- Facilitation Fee Payment for Dealers
- New Vehicle Registration – Road Tax Payment

- New Vehicle Registration – Infrastructure Cess Tax Payment
- Other State Vehicle – Passenger Tax
- Other State Vehicle – Road Tax
- Other State Goods Vehicle – Road Tax
- Other State Goods Vehicle – Cess Payment
- Bulk Payment of Passenger Taxes

OVERVIEW

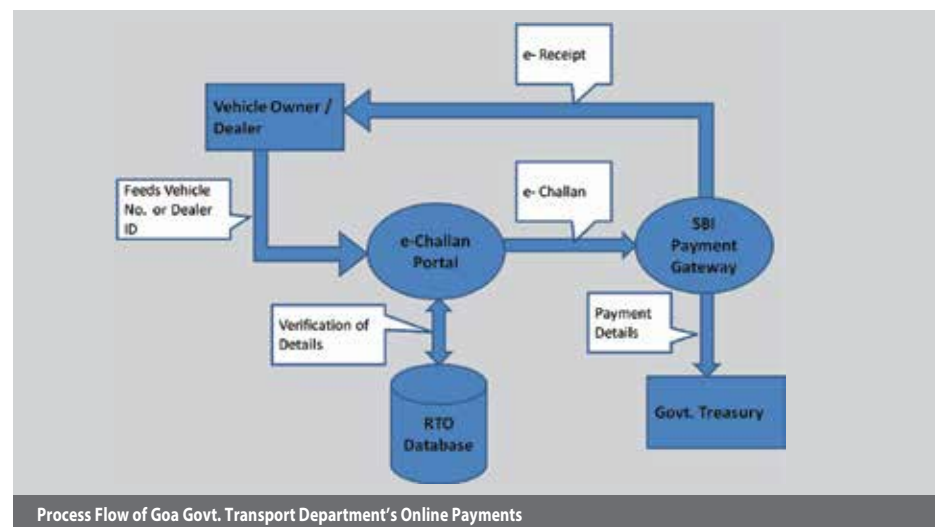
The services that are now offered by the Transport Department, Government of Goa to the citizens online are:

Web Wallet Deposit for Dealer

It allows the dealers to deposit to the web wallet through their own bank account online. As a result, the entire transaction takes less than 2 hours, which used to last up to 3-4 days when done manually. This helps the dealers to register a vehicle online even during weekends or on holidays.

Monthly Passenger Tax for Commercial Vehicle

The service allows passenger vehicles having a seating capacity of more than 8 to pay their monthly tax online. Earlier transporters had to visit the RTO every month to pay their monthly taxes.





Services launched by the Hon'ble Chief Minister and Hon'ble Transport Minister of Goa

Yearly Road Tax for Commercial Vehicle

Goods & Passenger vehicles can use this online service to pay their yearly tax eliminating the need to visit the RTO in person. Earlier transporters had to visit RTO every year to pay their yearly taxes.

Facilitation Fee Payment for Dealer

Vehicle Dealers facing a cash crunch for making payments related to inspection fee of a new vehicle by Motor Vehicle Inspectors to the Transport Department can use this service to make such payments through the e-payment channel.

New Vehicle Registration – Road Tax Payment & Infrastructure Cess Tax Payment

Purchasers of new vehicles who face difficulty in paying Road Tax for the vehicle they are purchasing due to various reasons can use this services to pay the road tax remotely using ePayment channels like credit/ debit card or net banking. It also allows the vehicle purchaser to make Road Tax and infrastructure cess payments online, solving their problems related to distance or time.

Other State Vehicle – Passenger Tax and Good Vehicle Tax

Usually, vehicles coming from other states paid their Road Tax and Passenger Tax at the check post in cash. However,

this process has also been moved online, meaning transporters and vehicle owners can now pay these taxes online as well, making the process smooth and efficient.

Bulk Payment of Passenger Taxes

The bulk payment service was recently introduced for transporters with multiple vehicles for paying monthly or bi-monthly taxes in bulk in one single transaction. This service has immensely benefitted the State Transport Corporation (Kadamba Transport Corporation, KTCL) in paying taxes on its nearly 400-500 vehicles through a single transaction every month. Once the State Transport Department has linked Bulk Payments to its portal, all the Private Transporters having multiple vehicles will also be able to avail bulk payment service for payment of their monthly passenger taxes.

The above mentioned services, as well as the movement of the payment avenues to the online mode, have benefitted many transporters from the State of Goa and from other states, allowing them to make payments through the e-payment facility.

With the introduction of online payment service, it is now easier for vehicle dealers and commercial vehicle operators like private bus owners, tourist taxis and rickshaw operators to make their monthly, quarterly and annual road/ passenger tax payments online without queuing up at the RTOs.

Besides, in order to monitor all the above payments, e-challan status view has been provided through e-Vahan portal to monitor the payments made by vehicle dealers, transporters and tour operators and the public in general. The e-challan status view provides status on all the e-challan payments done online and through the bank counter.

ONLINE PAYMENT PROCESS FLOW

Benefits of Online Payment

- Public/ Dealers can make the payments anytime or on any day.
- The need to physically visit the RTO has been eliminated to a great extent.
- Dealer deposits directly get updated to their wallet balance.
- Data reconciliation is easier.

SUMMARY

In the light of the recent moves taken by the Government, where stress has been laid upon on an economy less dependent on cash, the introduction of these e-payment services will help in providing all types of G2C, G2B and G2G services. The business transactions associated with dealers, manufacturers, spare parts supplier, private transporters & tour operators and the public can now be carried out directly through e-payment and in a more transparent and reliable manner. Since the e-transactions are posted directly, reconciliation saves a lot of the time at the RTO Level.

All the above-mentioned services for RTO, Goa have been provided through the e-Challan Payment Gateway portal, Government of Goa. The services are available at <https://egov.goa.nic.in/echallanpg>.

For further information, please contact:

JJR ANAND

State Informatics Officer

NIC Goa State Centre

H-Block, Paraiso-De-Goa,

Parovorum Goa

Email: sio-go@nic.in

Phone: +91-832-2410160/2410816

JavaHelp System:

Server Based CollabCAD® Help Viewer

The JavaHelp System allows users to access the help files and topics for the CollabCAD® software from their desktop or their browser application without necessarily having to install the CollabCAD® software. It allows for easy access to help for beginning users and a quick reference guide for the more experienced users.

GUNTUKU PRASAD

Scientist-F & HoD
gprasad@nic.in



RICHA TIWARI

Scientist-B
richa.tiwari@nic.in

Edited by
MOHAN DAS VISWAM



ollabCAD® is a 3D CAD Software system for collaborative design & development of Industrial Designs. It provides a total solution from product design, drafting, numerical control, visualisation to workflow and enterprise resource planning. It is an initiative of National Informatics Centre (NIC, Department of Information Technology), Bhabha Atomic Research Centre (BARC, Department of Atomic Energy) and Vikram Sarabhai Space Centre (VSSC, Department of Space). CollabCAD® has its comprehensive HTML documentation with supporting images in software installation.

The Help System of CollabCAD® has been developed using JavaHelp 2.0 API which provides a fully featured, easy to use system for presenting information to users. It has a help viewer interface with a Table of Contents, Glossary, Index and Search options for easy access to the documentation. For CollabCAD®, a server based help viewer has also been implemented to provide online access to documentation through a web browser without installing the software.

JAVAHHELP SYSTEM

The JavaHelp 2.0 binary distribution is available on the JavaHelp home page (<https://javahelp.java.net/>) to build a standard, full-featured help system for a simple Java application. JavaHelp software can be installed by extracting the downloaded zip file to any directory. In a Windows Only environment, variables such as JAVAHELP_HOME which contain the path to the installation folder of JavaHelp 2.0 need to be set. %JAVAHELP_HOME%\javahelp\lib\jhall.jar needs to be put in classpath. It is

advised to remove all prior releases of JavaHelp from your system before installing version 2.0.

HELPSET:

JavaHelp help system contains a set of files called the HelpSet. Together, these files provide the foundation of a working application help system. The JavaHelp HelpSet includes three types of files:

1. HelpSet data files: There are two HelpSet data files named the helpset file and the map file. The helpset file is the master control file for your help system. It must have the file extension .hs. The typical helpset file has four sections: the maps section, the views section, the presentation section, and the implementation section. When a user accesses the help system, the system starts by reading the .hs file. The map file is used to associate an ID to each help topic by mapping the ID string to the URL of the help topic file for navigational purpose. The map file has the file extension .jhm.

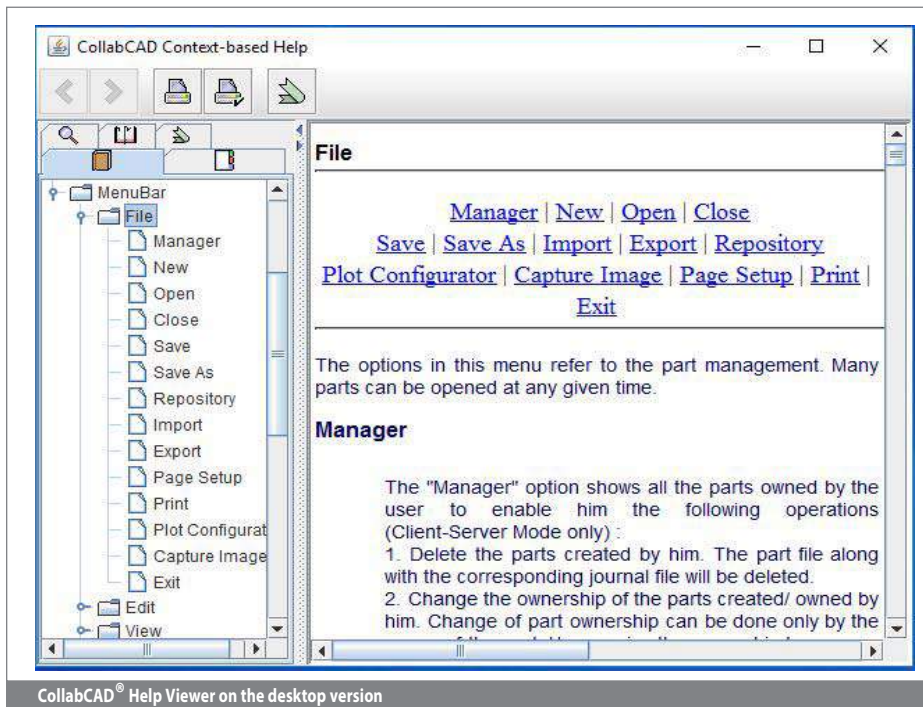
2. Navigation files: Four types of navigation files are TOC, Index, Glossary, and Favourites. The help system reads the information in these files to build the four types of navigation views and then displays them in the navigation pane.

3. Topic files: Topic files are in HTML format. It is advisable to specify the <title> tags in the HTML files, because the <title> tags will be used in the search database for the full text search.

Once topic files, navigation files, the map file and the helpset file have been coded, the helpset can be opened by running hviewer.jar in %JAVAHELP_HOME%\demos\bin.

FEATURES

Many of the features of JavaHelp have



been incorporated into the Desktop based CollabCAD® Help System. Some of the salient features are:

- **Context-Sensitive help:** Context-sensitive help is an especially user-friendly way to deliver information to the users. When a user clicks a particular

icon or field, a pop-up window explains the function or the next step that goes with that field. CollabCAD® supports Window Level Help i.e. User can use Help Key (F1) to invoke help system for introductory topics or topic specific help. CollabCAD® also provides Field-level Help. When a specific component on the

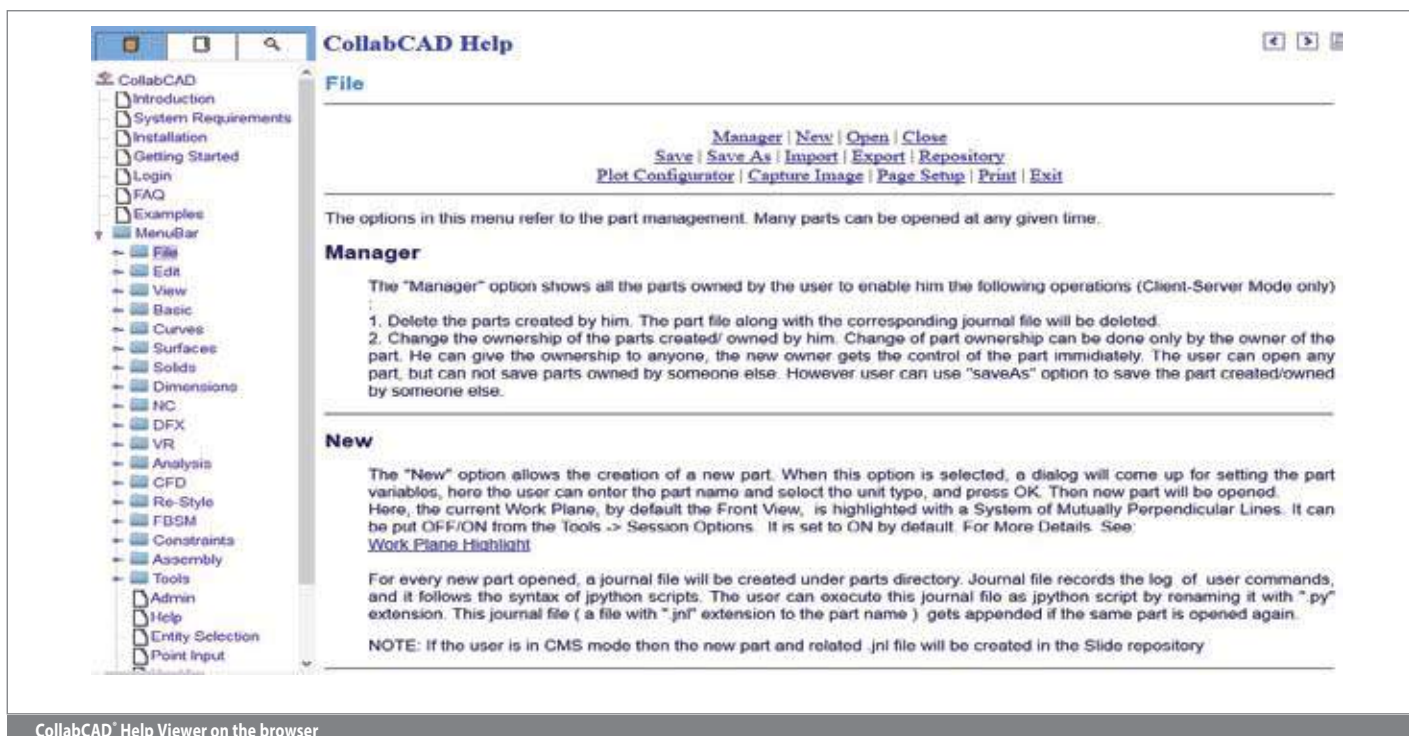
Java application's GUI, such as a text field or button, has the focus, the user presses the Help key (F1) or clicks a button to launch the help system with a specific topic describing the current component.

- **Search Database:** CollabCAD® uses Java Help API which will automatically index help topics directory and build the search database for the application. Search functionality is an essential part of the help system.

- **Merging helpsets:** Large, modularized applications may require the creation of numerous helpsets, perhaps even by different teams working on various aspects of the application. Merging helpset helps in viewing different helpsets as one. In CollabCAD®, there are different helpsets for Plot Configurator module and CAD Modeling Module of CollabCAD®. These are merged using this feature in order to display it in a single Help Viewer. There are four merge types in JavaHelp 2.0: SortMerge, UniteAppendMerge, AppendMerge and NoMerge.

SERVER-BASED HELP SYSTEM

Server-based applications have the same



need for online help as client based applications, but they require that the helpset runs in a web browser, as the applications do, and that it be accessed from a server. CollabCAD® has provided web help (<https://collabcad.gov.in/CollabCADHelp/>) to the registered users, so that they can access it without installing the software. For the CollabCAD® Server based Help Setup, the code from JavaHelp 2.0's serverhelp demo is used. This code is in the %JAVAHELP_HOME%\demos\serverhelp\web directory.

SERVER-BASED JAVAHELP ARCHITECTURE

The diagram below illustrates the architecture. A browser initiates a JSP request. Examples of a JSP request are displaying the help content in the helpset, the navigators, or the data for a given navigator. Typically, the JSP request contains JavaBeans™ components as well as JSP tag extensions. The Java server turns the

accomplished through a combination of JavaBeans components specific to the JavaHelp system and JSP tag extensions.

• JSP files:

JSP enables web developers to develop dynamic web pages. JSP uses XML like tags to encapsulate the logic that generates web content. There are several important JSP files. navigator.jsp is used to get the views from the helpset file. javax.help.TOCView.jsp, javax.help.SearchView.jsp, and javax.help.IndexView.jsp each build their corresponding views. The help.jsp file controls the overall presentation of the help window. All these files are used in CollabCAD® that helps to control the presentation and flow of the CollabCAD® Help System.

• JavaHelp server bean:

ServletHelpBroker is the JavaBeans component that stores help state information, such as the helpset in use, the current ID, the current navigation view, and other

• Navigator Scripting Variables:

The navigator, tocItem, indexItem, and searchItem tag extensions introduce a predefined set of scripting variables into a page. These variables enable the calling JSP to control the presentation without having to perform processing to determine the content. Unless otherwise specified, each scripting variable creates a new variable, and the scope is set to NESTED. NESTED variables are available to the calling JSP only within the body of the defining tag.

• JavaScript files:

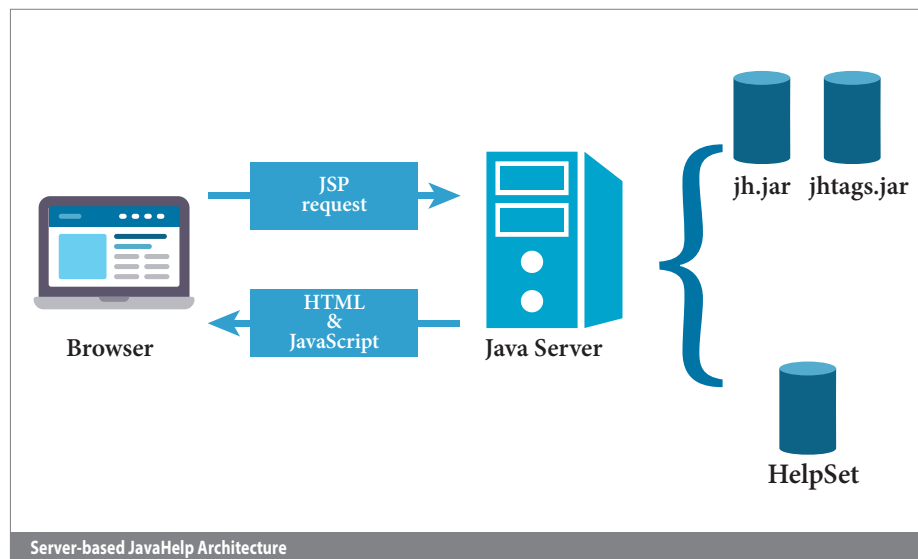
There are several important JavaScript files. tree.js is used to build a tree. The navigation trees for the TOC and Index views can be created using this file. The file searchList.js can be used to build a tree for the Search view. util.js checks whether any change in the content has occurred. If a change has occurred, an update will be fired with the change.

CONCLUSION

This article gives a brief overview of JavaHelp 2.0 technology, the Java platform's help system API. JavaHelp, is a full-featured, standard help system that can be easily implemented into any Java application. JavaHelp 2.0 also provides an option to develop a web based help system for users on a network application.

References

1. <https://java.help.java.net/>
2. <https://docs.oracle.com/cd/E19253-01/819-0913/819-0913.pdf>
3. <http://www.ibm.com/developerworks/library/j-javahelp2/>
4. <https://java.net/projects/javahelp/sources/svn/show/branches/index-keywords-27/JavaHelp/demos/serverhelp?rev=89>



request into a Java Servlet. The servlet accesses the appropriate information from the helpset by using the classes in the JavaHelp library (jh.jar) and the JavaHelp tag library (jhtags.jar) and returns HTML and possibly JavaScript or dynamic HTML (DHTML) to the browser.

JAVAHHELP SERVER COMPONENTS

Access to the helpset data on a server is

pieces of help information. The ServletHelpBroker is used in the JSP request with a session scope.

• JavaHelp JSP Tag Extensions:

There is a standard set of tag extensions in the JavaHelp tag library that can be used to invoke application functionality. Like validate tag is to validate Help broker and helpset and then to load the helpset that has been defined either in the validate tag with the helpSetName attribute.

For further information, please contact:

GUNTUKU PRASAD
Sr. Technical Director & HoD
CollabCAD Division, NIC, A-Block
CGO Complex, Lodhi Road, New Delhi- 110 003
Email: gprasad@nic.in
Phone: 011-24305177

Azerbaijan's Project for the Modernization of ICT to enter next Stage

The next stage of the project on “Modernization of Sustainability and Efficiency of ICT Infrastructure and Services in Azerbaijan” will start soon.

This has been made possible due to the agreement reached between the United Nations Development Programme (UNDP) in Azerbaijan and the country's Ministry of Communications and High Technologies.

According to the UNDP, the project's objectives are extending the areas of application of ICT, maximizing socio-economic impact and creating multi-stakeholder dialogue for bridging the digital divide at the regional level.

Under the project, multiple partnerships will be pursued with international organizations like UNDESA, UNECE, UNPAN, UNESCAP and others, with national and local authorities, civil society, business circles and bilateral partners in Azerbaijan.

In addition to this, joint activities have been planned for implementation of the TASIM (Trans-Eurasian Information Super Highway) project, for development of a national innovation driven, developing economy, as well as infrastructure, e-government and other spheres. The project also provides for



cooperation in the organization of the Regional Internet Governance Forum in Baku.

UNDP Azerbaijan has been a long-time partner of the Government of Azerbaijan within the area of ICT. Throughout these years, many projects with various state institutions have been realized like the preparation of the National ICT Strategy, the establishment of the AzDataCom network, the creation of the Data Center and automation of business processes in the State Social Pension Fund, Ministry of Justice, State Customs Committee and other government sectors in Azerbaijan.

Source: <http://www.azernews.az/>

Tunisia launches new e-Government Strategy “Smart Gov 2020”

The new e-government strategy by the Government of Tunisia, “Smart Gov 2020”, funded by the AfDB to the tune of 500 million dinars, was inaugurated by Anouar Maarouf, Minister of Information Technologies and the Digital Economy.

In his address, he mentioned that the project rests upon five pillars: re-engineering of administrative processes in the service of the citizens, streamlining flow of information between different administrations, reforming the information systems of all sectors to integrate the e-governance system, introducing new

e-governance service and enhancing Open-Gov to encourage investments.

Through this project, Tunisia aims to digitize the Tunisian administration through e-service with a goal of “zero paper” by 2020 and eradicate the complexity and slowness of current administrative procedures favouring certain forms of corruption.

It was highlighted that the current state of administration does not favour investment or progress, especially when the economic situation is marked by an abysmal budget deficit that would rise to 6% at the end of 2016, accentuated by the worsening of public debt, at around 64% of GDP, against just over 40% in 2010.

These reforms come at an opportune moment as Tunisia tries to revive its economy, stimulate growth and initiate a new economic dynamic, by organizing the “Tunisia 2020” conference, which aims towards reinstating Tunisia as a preferred destination for businesses and investments.

Between donations, aid and credits, the event garnered a total financing amount of 34 billion dinars aimed towards programs with an objective of revamping the Tunisian Economy.

Source: <http://africanmanager.com/>



Tunisia 2020 Conference

The Estonian e-Governance Academy to develop e-services in Ukraine

Over the next two years, the Tallinn-based e-Governance Academy is planned to assume a lead role in creating a data exchange and information system in Ukraine, enabling up to 600 local service centres in the country to provide up-to-date public services to the people by exchanging information with national central registries

The data exchange and information system to be set up is expected to cost €5.7 million with funding coming from the EU, the Swedish government and the Estonian ministry of foreign affairs. Ukraine's counterpart in this project is the State Agency of e-Governance.

According to Hannes Astok, the director for development and strategy at the e-Governance Academy, this project is the most ambitious one undertaken so far by the organisation in terms of its financial volume as well as scope.

"We will start the project by mapping existing services and databases and procuring a data exchange system to provide Ukraine with an efficient and secure method for cross-usage of data. Developing e-services will help the Ukrainian government reduce red tape – citizens will not have to submit the same data repeatedly. It will also mitigate the risk of corruption – due to data processing and other actions of the state becoming more transpar-



eGA is a consultancy organization and think tank founded in 2002

ent," Astok said in a statement.

Creating up to 600 service centres is part of Ukraine's decentralisation effort, which involves central authorities delegating duties to the local level. It is planned that as many as 70 public services will be available in Ukraine in a fully electronic format upon the project's completion in 2020.

The e-Governance Academy has supported Ukraine's efforts towards e-governance since 2012. Previously, its experts have helped Ukraine prepare policy papers, support the development of a document exchange system and create e-services for local governments in Western Ukraine.

Source: <http://estonianworld.com/>

Seoul adjudged Best Performing City for Municipal e-Governance

Rutgers SPAA Global E-Governance Survey has identified Seoul, South Korea, as the top-ranked city in terms of performance of municipal e-governance for the years 2015-16. The survey evaluated the performance of websites of municipalities worldwide for privacy and security, usability, content, services, and citizen and social engagement, and ranked the cities on a global scale.

The research study was conducted jointly by the E-Governance Institute in the School of Public Affairs and Administration (SPAA) at Rutgers University-Newark and the Department of Public Policy and Public Affairs, John W. McCormack Graduate School of Policy and Global Studies at the University of Massa-

chusetts, Boston, and was co-sponsored by the Public Technology Institute (PTI).

Seoul retains its top ranking in municipal e-governance, having done so in the previous six surveys conducted since 2003. The city also ranked first in the categories of content, services, and citizen and social engagement. Seoul provides technologies for citizens to communicate suggestions and participate in the policy process, along with enabling public administrators and elected officials to respond directly to citizens. The website also continues to act as a leading example of privacy protection and Internet security.

Helsinki was ranked 2nd in the survey, rising significantly from #16 in the previous 2013-14 survey. The home page of the Helsinki website is user-friendly, interactive, and enables citizen engagement with public officials through social media platforms.

The continued study of municipalities worldwide will further provide insights into the direction of e-governance and the performance of e-governance throughout the regions of the world. According to Dr. Marc Holzer, "The E-Governance Performance Index used for the survey is a set of benchmarks that spotlight high levels of performance throughout the world and foster high expectations for improved web-based municipal service delivery."

Source: <https://www.newark.rutgers.edu/>

Rank	City	Rank	City
1	Seoul	6	Tallinn
2	Helsinki	7	New York
3	Madrid	8	Bratislava
4	Hong Kong	9	Yerevan
5	Prague	10	Vilnius

Launch of the Shimla Municipal Corporation Mobile Application by Hon'ble Chief Minister of Himachal Pradesh

Shri Virbhadra Singh, Hon'ble Chief Minister of Himachal Pradesh launched the Shimla Municipal Corporation's Android Mobile Application on 20th of September, 2016. On the occasion, Shri Virbhadra Singh said that the Mobile App will open the channels of communication between the Municipal Corporation and the citizens and help them in their interactions related to water, garbage, street lights and planning permissions. He lauded the efforts of the Municipal Corporation, Shimla and National Informatics Centre and directed the corporation to provide more citizen centric services through online platforms.

Smt. Manisha Nanda, Additional Chief Secretary (Urban Development), GoHP, Shri T.G. Negi, Principal Advisor to Chief Minister, Shri Sanjay Chauhan, Mayor, Municipal Corporation, Shimla, Councillors of the MC, Shimla and Shri Pankaj Rai, Commissioner, MC Shimla were present at the event.

A presentation on the various features, interfaces and operation of the mobile application was given by Shri Ajay Singh Chahal, State Informatics Officer, NIC Himachal Pradesh.



Hon'ble Chief Minister, Shri Virbhadra Singh launching the Mobile App. Seen also are Smt. Manisha Nanda, ACS (UD) HP and Shri Sanjay Chauhan, Mayor, Shimla

The mobile App is available on the official portal of Himachal Pradesh Government (<http://himachal.nic.in>), NIC's national Mobile App Store (<http://egovmobileapps.nic.in/>) and the Google Play Store besides the Municipal Corporation, Shimla's official website (<http://shimlamc.org>). The app is bilingual (Hindi & English) and provides offline informative content to users in addition to the online interactive features.

The Shimla MC App has been designed and developed by NIC Himachal Pradesh, which is one of the four competency centres for mobile App development of NIC in the country.

- SANDEEP SOOD, HIMACHAL PRADESH

Launch of e-Labharthi for Social Security in Bihar by the Hon'ble Minister, Social Welfare Dept.

The Direct Benefit Transfer scheme "e-Labharthi" for social security in Bihar was launched by Smt. Manju Verma, Hon'ble Minister of Social Welfare Department at a function organized in Patna on the 27th October, 2016. Present at the occasion were Mrs. Vandana Kinni, IAS, Principal Secretary, Social Welfare Department and Shri R. S. P. Daftuar, IAS, Director, Social Security with other officials of the Department and the State administration.

Shri Shailesh Kumar Shrivastava, TD & Project Coordinator, gave a detailed presentation highlighting the current methodology, the changes and advantages brought on by the introduction of "e-Labharthi". He emphasized that the digital ecosystem being setup for the delivery of social security schemes of the Government will have far reaching effects and will go a long way in increasing its efficiency. The new system has

introduced Electronic Benefit Transfer System through PFMS (Public Finance Management System) which aims at cutting down the involvement of middlemen and eliminating wastage of public funds. With Aadhaar linked bank accounts, the system ensures that only the true beneficiaries receive the benefits of the subsidies, pensions etc. and ghost or fake beneficiaries are weeded out from the system.

- RAJIV RANJAN, PATNA



Launch event of e-Labharthi at Patna

CPCB-eSamikSha launched by Shri Anil Madhav Dave, Hon'ble Environment Minister

Shri Anil Madhav Dave, Minister of State (Independent Charge) of Environment, Forest and Climate Change (MoEF&CC), launched the CPCB-eSamikSha Portal on 23rd November, 2016 during the 61st Conference of Chairmen & Member Secretaries of Pollution Control Boards and Pollution Control Committees at India Habitat Centre, Lodhi Road, New Delhi.

eSamikSha, an online Monitoring and Compliance Mechanism system, developed by Cabinet Secretariat Informatics Division, fast tracks the compliance of pending action points, proposal, targets, etc. of various Ministry/ Department/ Organization/ Agency of Government of India and Government of States/ UTs. The portal has been designed in such a way to enhance efficiency, bring transparency, reduce the need of protracted correspondence and improve the communication between Government to Government (G2G) and Government to Business (G2B) and vice-versa.

Shri Ajay Narayan Jha, Secretary, MoEF&CC, Shri S.P.S Parihar, Chairman, CPCB, Dr. A.B Akolkar, Member Secretary, CPCB, Member Secretaries of State Pollution Control Boards and Pollution Control Committees, Dr. Shubhag Chand, HoD, Cabinet Secretariat Informatics Division and other senior dignitaries were also present at the event.



Snapshot of the inaugural event at State Secretariat, Shillong

At the launch Shri Dave said that there is a need to feel the pulse of the people and complaints of the people must be addressed. He emphasized on a collective approach to work. Shri Dave highlighted that the style of working needs to be converted to e-governance, for which eSamikSha would be a helpful tool. eSamikSha will not only transform the style of functioning, but will also bring about a transformation, making it a result-oriented approach to work.

Dr. Shubhag Chand briefed about the CPCB-eSamiksha portal.

The launch session was concluded with a vote of thanks and concluding remarks by Shri S.P.S Parihar, Chairman, CPCB.

- DR. SHUBHAG CHAND, NEW DELHI

Capacity Building Programme on Cashless Society and Digital Payment Systems organized in Jind

Two capacity building programs were conducted by NIC District Centre, Jind, on 30th November, 2016 at the DRDA Hall, Jind to raise awareness and promote cashless society and Digital Payment methods. The officials in attendance were informed of the vision of a cashless society and various methods of payment like Aadhaar enabled Payment System, USSD, UPI, Wallets, PoS and cards were demonstrated during the presentation. Audio visual aids and hands on training were also provided to programme attendees. More than 400 officials attended the event, which was in two sessions. The CSC VLEs, Bank BCAs, Education Department, AM (MIS) attended the first session and employees & officers of other



Participants at the capacity building programme

departments/ offices were present in the second batch. The Sessions were chaired by Deputy Commissioner, Jind. Several other senior officials also attended the programme.

- DEEPAK SAWANT, HARYANA

Workshop organized by State Innovation Cell, Odisha on Innovation in Education and Engineering Design

As a part of interconnectivity with various educational/ research institutions, a one day workshop on “Innovation in Education and Engineering Design” (IEED-2016) was organized by SIC in collaboration with the Planning and Convergence Department, Government of Odisha and Design Innovation Centre (DIC), IIT Bhubaneswar at Hotel Swosti Premium, Bhubaneswar.

NIC Odisha State Centre is actively involved with the innovation cell not only for development of the dynamic portal, but also to extend all possible ICT support to drive innovation in the State and harness core competencies, local talent, resources and capabilities to create new opportunities.

Shri R. Gopalakrishnan (Executive Director, Tata Sons Ltd,

Member, National Innovation Council-NInC) graced the occasion as Chief Guest of the event.

The NIC team comprising of Dr. A K Hota, Sr.TD, Shri Tapan Ray, TD and Shri Nihar Ranjan Biswal, Scientist-D, with the guidance of Shri P. K. Pramanik, DDG & SIO, coordinated the Awards distribution session for successful, innovative and proven concept, projects or prototypes.

The workshop was attended by many policy makers, engineering graduates and faculty members of different disciplines from various engineering colleges of the state.

Shri R. Balkrishnan, IAS, Development Commissioner cum ACS, Prof. R. V. Raja Kumar, Director, IIT, Bhubaneswar, Prof. B. Gurumoorthy, IISc Bangalore, Shri. H. Senapaty, Director, NCERT and Shri S. K. Mohapatra, Dean, Continuous learning programme, IIT Bhubaneswar graced the event with their presence and addressed the audience.

Further, the logo for the State Innovation Cell designed by NIC and approved by Government of Odisha was also released at the event by Shri Balkrishnan.

- A. K. HOTA, ODISHA

eProcurement Conference organized by Government of Mizoram

The Government of Mizoram conducted a two day workshop on eProcurement in Aizawl on the 17th and 18th November, 2016. All the Departments of the State Administration use the online eProcurement System GePNIC developed by NIC, with a threshold of Rs. 1 Crore for all contracts done in the online mode.

The first day of the workshop was chaired by Chief Secretary, Government of Mizoram, Shri Pu Lalmalsawma, IAS. Addressing an audience of Secretaries and representatives from most of the departments, he stressed upon the need of transparency through the online mode of tendering and the State's commitment towards this Missions Mode Project.

A meeting followed the workshop with participation of Secretaries of various departments on State specific issues and implementation plans. Shri C Lalhmachhuana, Secretary, ICT department, Government of Mizoram, emphasized the commitment of the State to implement online tendering in a phased manner to cover all departments, including goods and services in due course. Shri Lalthlamuana, Chief Informatics Officer, gave the vote of thanks and focused his speech on the close relationship between the State ICT department and NIC to make the initiative a success in the State of Mizoram.



Participants at the Workshop on GePNIC

The second day of the workshop at NLUP conference hall witnessed the enthusiastic participation from most of the departments of the State and the interactive session was conducted with a live demonstration of the online tendering process. The presentation and demonstration included the entire process of online tendering, from tender preparation till Award of Contract.

Mrs. Lallianmawii Hnamte, SIO, Mizoram expressed her heartfelt gratitude to Shri C Lalhmachhuana for organizing the workshop and extending support for the overall success of the project.

- LALHMACHHUANI, MIZORAM

'Indian Police at Your Call' Mobile App Launched by Hon'ble Prime Minister

Hon'ble Prime Minister of India, Shri Narendra Modi launched the "Indian Police at Your Call" Mobile App developed by NIC at the National conference of DGs/ IGs of Police at Sardar Vallabhbhai Patel National Police Academy (SVPNPA), Hyderabad on Saturday, 26th November 2016. Hon'ble Union Home Minister, Shri Rajnath Singh, Union Ministers of State for Home, Shri Hansraj Gangaram Ahir and Shri Kiren Rijiju graced the event with their presence. The National Security Advisor, the Union Home Secretary and the Director, Intelligence Bureau were also present at the occasion.

Having is a GIS Map based interface for citizens to locate police stations near to their current location so that they can easily reach the police station in case of an emergency, the App displays the current location of the citizen on the Map along with details such as name of places, roads and major landmarks. It dynamically fetches details of all the nearby located police stations and can be refreshed at regular intervals.

The App further provides the facility to "Tap" any of these police stations and know the route and road distance to reach there. Contact numbers of the Police Station, District Control Room and office of the Superintendent of Police are also displayed. Users can select any of these numbers and make a



Hon'ble Prime Minister, Shri Narendra Modi launching the mobile App at the Annual Conference of DGs/ IGs of Police, Hyderabad

call using the App to get immediate help. It has the facility to display the details of police stations at other locations also so that one can know details without visiting the location.

Based on the requirement of Ministry of Home Affairs, NIC has developed this citizen centric mobile App. The Centre of Competency for Mobile App Development, NIC at Patna, Bihar has developed the Android version of the App and its necessary backend web services. The App in iOS platform was developed by Centre of Competency for Mobile App Development, NIC at Kannur, Kerala. The Android and iOS versions are available for free download.

The Indian Police at Your Call App is a 'Digital India' initiative aimed towards maintaining the safety and security of citizens anytime, anywhere.

- C J ANTONY, NEW DELHI

